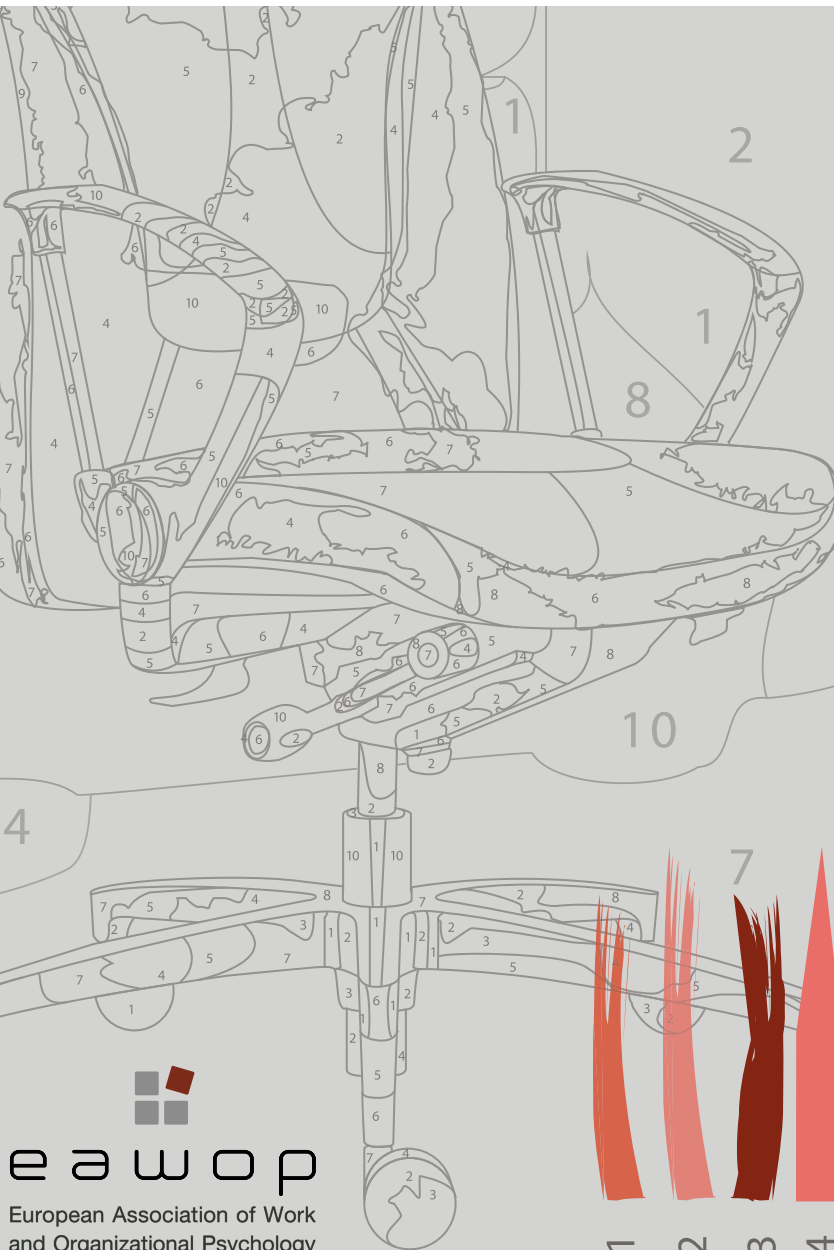


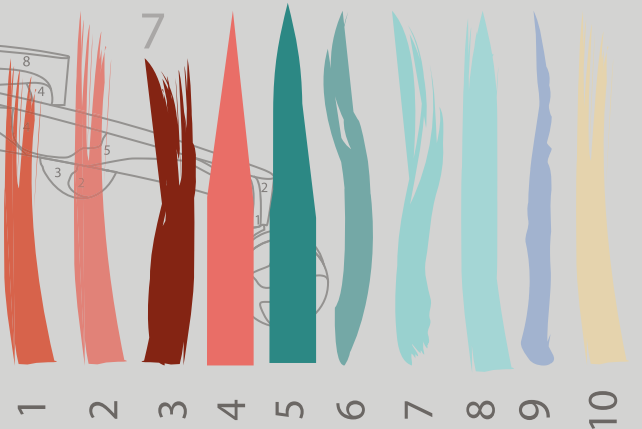
*Imagine the future world:  
How do **we want** to work tomorrow?*

# Abstract proceedings of the 16th EAWOP Congress 2013

*Editors: Guido Hertel - Carmen Binnewies - Stefan Krumm - Heinz Holling - Martin Kleinmann*



  
**eawop**  
European Association of Work  
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*Imagine the future world: How do we want to work tomorrow?*

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**Editors:**

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# Preface

The contributions summarized in this volume have been presented at the 16th Congress of the European Association of Work and Organizational Psychology (EAWOP) in Münster, Germany, May 22-25<sup>th</sup>, 2013. The bi-annual EAWOP Congress has a long and successful history that started in 1983 when work and organizational psychology became professionalized. Today, the EAWOP congress is one of the largest international conferences of work and organizational psychologists worldwide, and the largest in Europe.

For the current congress, we had received more than 1.700 abstract submissions from over 50 different countries. All submissions were subject to a double-blind review process supported by more than 100 international reviewers (their contribution is thankfully acknowledged on the following pages). In addition, numerous invited sessions with internationally renowned keynote speakers as well as invited symposia, invited debates, and panel discussions supplemented a manifold program.

The theme of the EAWOP Congress 2013 “Imagine the future world: How do we want to work tomorrow?” particularly focuses on new challenges that we experience in work organizations today and tomorrow, such as globalization and digitalization of economic processes, flexible work with remote partners, demographic changes, financial turbulences, and growing climatic problems. Providing new and innovative ideas on mastering these challenges, this congress is not only a stimulating event for the community of work and organizational psychologists, but also offers new

ideas and concepts for decision makers in related disciplines, consultancies, and politics.

For the first time, the abstracts of the EAWOP Congress are published in an edited online volume with a permanent identifier – urn:nbn:de:hbz:6-66399491491 – in order to facilitate citation and higher visibility of the abstracts (see also <http://nbn-resolving.de/urn:nbn:de:hbz:6-66399491491>). In this volume, the abstracts are ordered according to the different content topics of the EAWOP Congress 2013. This order is meant to facilitate a more focused reading (“what’s new in the field of ...”) also for persons who could not attend the congress. Moreover, the author index at the end of this volume as well as online search engines for pdf documents enable easy finding of specific contributions. Finally, e-mail addresses of first authors are included for each abstract to facilitate mutual contact.

Publishing an abstract volume like this is not possible without support, particularly given the short time interval between the finalization of the congress program and the start of the congress. We thankfully acknowledge the outstanding support from Jasmin Bohnenkamp, Eva Brosch, Elisabeth Tenberge, Linda Mohr, Frederike Hibben, Friederike Jansen, and Michael Filusch during the compilation of this abstract volume – thank you!

Being the editors of this volume, we hope that the abstracts in this volume not only serve as a reminder for those who have attended the different presentations summarized, but also might pave new contacts for readers interested in one of the different topics of work and organizational psychology.

Münster, May 2013

Guido Hertel, Carmen Binnewies, Stefan Krumm, Heinz Holling, and Martin Kleinmann (Editors)

# Theme of the 16<sup>th</sup> EAWOP Congress 2013

"Imagine the future world: How do we want to work tomorrow?"

We live in a time of radical and rapid changes that tremendously affect the way we work and the way we live. Globalization of economic processes, digitalization and the increasing overlap between business and social networks, flexible work with remote partners, demographic changes, financial turbulences and growing climatic problems are just a few examples of the dramatic developments we experience today. Apart from challenges and strains for individual workers and work organizations, these dynamics also provide opportunities for changes for the good, for improvements and creative advancement. However, in order to realize these opportunities we not only need sound knowledge of these dynamics and underlying processes, but also fantasy, creativity, and courage to implement new solutions.

The organizers of the 16<sup>th</sup> EAWOP conference want to provide an inspiring arena for sharing, discussing, and creating new ideas and future trends for work organizations to enhance both organizational effectiveness as well as growth and health of the working people. In doing so, we – as work and organizational psychologists – not only react to external influences, such as technological advancement, political decisions, or economic rationales. Discussing how we want to work tomorrow stresses our active role in the creation and crafting of future work conditions. Human needs and cognitions are

an important starting point for technical engineering both at the level of single tasks as well as at the level of workflow design in organization. Transparency and fairness concerns are central aspects for strategic activities of managers, union officials and governmental decision makers alike. Affect, work-related values, and concerns for others are not examples for deniable exceptions or irrationality but important elements in a comprehensive modeling of economic processes.

Therefore, we like to invite scientists and practitioners of work and organizational psychology – as well as from related fields – to imagine, share, and discuss innovative and sustainable solutions to the manifold challenges we experience today, striving for a future world in which all of us enjoy working and living together.



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# Invited Keynotes

## Invited Keynotes

### Creativity at Work: Today and Tomorrow

Speaker: Todd Lubart (Univ. of Paris V, FR)  
[todd.lubart@univ-paris5.fr](mailto:todd.lubart@univ-paris5.fr)

Facilitator: Heinz Holling (Univ. of Münster)

Creativity can be defined as the ability to generate new, original ideas that are useful, and adaptive in their context. In the workplace, creative thinking contributes to the invention of new work processes or products. Original ideas may ultimately lead to innovations that can be adopted within the organization or in the wider marketplace. More than a century of research on creativity will be examined in terms of four main topics: the Creative Person, the Creative Process, the Creative Place (or Press), and the Creative Product. The creative person refers to the cognitive, personality, motivational and emotional characteristics that support the generation of original, adaptive ideas. According to the multivariate approach, which will be highlighted, an interactive combination of personal resources is necessary but the mix of resources varies to some extent as a function of work domain. It is possible to detect these resources and (1) to measure them and develop procedures to select people with creative potential, (2) to orient people to appropriate tasks in order to optimize the use of their human capital for creativity and (3) to design human resource development programs that promote creativity based on individual's profiles of creative potential. The creative process refers to the sequence of thoughts and actions involved in

the production of a creative idea. Initially conceived as a "black box", research has allowed a series of component operations to be identified. These "sub-processes" are then called into play in various combinations that result in more-or-less creative ideas. Research from several work domains—fine artists, designers, scriptwriters, music composers, and scientist-inventors—will be presented. The creative process is examined in terms of its generality and specificity across these professional domains. Differences in the work process are then related to differences in the creativity of the resulting production. Creativity techniques are situated with respect to the creative process literature. The Creative place, creative "press" or environment has been the subject of numerous recent studies, examining both the physical and psychological factors that impact creativity. Work at the organizational and national cultural levels are integrated to provide an overview of current thinking. Evolutions in the workplace are highlighted and the possibilities offered by new virtual work environments are explored. The creative product refers to the productions or work output that is recognized as novel, original and adaptive in its context. The criteria used to evaluate creativity and the social nature of this evaluation process are examined. Judge's characteristics, such as their expertise or personal creative ability, and implications for detecting creative ideas in the workplace are proposed. Finally, some objectives to promote further the understanding and development of creativity in the workplace will be identified as part of a 21<sup>st</sup> century research agenda.

## Work and Organizational Psychology Contributions to Environmental Sustainability

***Kindly supported by Deutsche Post DHL***

Speaker: Deniz S. Ones (Univ. of Minnesota, US)  
[onesx001@umn.edu](mailto:onesx001@umn.edu)

Facilitator: *Martin Kleinmann (Univ. of Zurich)*

Today's workplaces are changing to minimize, mitigate, and neutralize organizations' environmental impact and bring about positive environmental change. Thus far, environmental sustainability in work settings has mostly been studied at the organizational level. Concomitantly, strategic management scholars and applied economists unfortunately often confound corporate social responsibility (CSR) and corporate environmental performance. CSR aims to improve the safety, health, and well-being of individuals (employees, customers, and external stakeholders) directly (e.g., by contributing to social causes, ensuring proper working conditions, or investing in training and education). Environmental performance involves the responsible management of natural resources in business operations to ensure the sustainability of the natural environment, in order to sustain organizational economic viability, as well as thriving life on earth (Ones & Dilchert, 2012b). The nomological networks of the two constructs are distinct (Ones & Dilchert, 2013).

Organizational environmental performance involves managing natural resources and the natural environment in the process of conducting business. It includes both pro-environmental initiatives that organizations undertake and environmental outcomes. The former focuses on what organizations *do* for environmental sustainability. The latter corresponds to the ecological impact or footprint of organizational activities.

In contrast to economic performance and productivity, although environmental performance is not an area that work and organizational (W-O) psychologists have contributed to either in terms of research or in terms of applications, we must be involved (Ones & Dilchert, 2012). Why?

Ecological initiatives in organizations typically focus on reducing or mitigating the environmental impact that products and processes have on water, land, natural resources, biodiversity, energy availability, and so forth (e.g., improving product design for environmental sustainability; creating more efficient or less impactful manufacturing processes or supply chains). However products and processes are created by people, adopted by people, and used by people. Embedding environmental sustainability into organizations requires *workforce involvement*. Workforces, from individual contributors to organizational leaders, are at the core of environmentally responsible organizations. W-O psychology's knowledge and methods can be harnessed to sustain and improve the quality of life on this planet by aiding organizations that strive for environmental sustainability. W-O psychologists can support and even lead environmental sustainability efforts.

### ***Delineation of A New Criterion: Employee Green Behaviors***

In order to manage and lead organizational workforces for environmental sustainability, we need to know the nature of behaviors that lead to or detract from environmental sustainability. In order to attract, recruit, select, nurture and retain employees who will display environmentally sustainable behaviors, one needs to know which individual characteristics relate to such behaviors. In order to train workers for environmentally responsible performance, we need to first examine what such performance entails. A better understanding of what constitutes pro-environmental behav-

iors, in general and at work specifically, is essential at all stages of human resources management.

*Pro-environmental behaviors* are environmentally relevant “individual behaviors that contribute to environmental sustainability” (Mesmer-Magnus, Viswesvaran, & Wiernik, 2012, p. 169)—that is, they have a positive impact on the natural environment. These behaviors can be part of one’s personal (private or public) or professional life.

However, when pro-environmental behaviors are undertaken in relation to individuals’ jobs and when the employing organization can exert a degree of control over such behaviors, they are referred to as *employee green behaviors* (Ones & Dilchert, 2012). They may be required (e.g. part of the job or organizational mission) or may not be undertaken on a volitional basis. Based on large scale critical incidents studies, we identified the environmentally-relevant behaviors that employees actually engage in in connection with their activities at work. We were careful to exclude outcomes and consequences that are not under the control of the employee. Based on several thousand critical incidents, we created a taxonomy of Employee Green Behaviors that classifies these behaviors into psychologically meaningful, functionally similar categories. Major behavioral categories of employee green behaviors are: (1) Conserving (avoiding wastefulness and thus preserving resources), (2) Working Sustainably (creating or adopting new work products and processes to minimize their negative impact on the environment), (3) Avoiding Harm (preventing or mitigating harm to the environment), (4) Influencing Others (encouraging and educating for environmental sustainability), and (5) Taking Initiative (acting as change agents, undertaking entrepreneurial activity, or making sacrifices for environmental sustainability). These five categories are further subdivided into more than a dozen

functionally distinguishable, behavioral categories with relatively homogeneous content (see Ones & Dilchert, 2012, for details).

Without employees and their engagement and deep involvement in environmental sustainability, organizations cannot fulfill their responsibility in sustaining the natural environment of our planet. W-O psychologists can offer two complementary approaches to change employee behaviors: person-based and intervention-based approaches. Person-based approaches are based on individual differences and aim to shape organizational behavior through targeted staffing decisions. They include employee recruitment, selection, and retention based approaches that target employee flows into and out of the organization. In contrast, intervention-based approaches focus on altering employees’ behaviors using educational, motivational, learning, training, development, and change management strategies. Although the effectiveness of these two types of approaches has not been studied in organizational settings, some fundamental relationships that underlie each approach can be inferred from the broader pro-environmental behavior research. More importantly, W-O psychologists know how to harness each type of approach for affecting positive organizational change in other criterion domains such as job performance, citizenship behaviors and employee deviance. It is time to put our field’s research evidence based applications into organizational practice for environmental sustainability.

## Current Trends and Best Practices at Deutsche Post DHL

*Speaker: Angela Titzrath (Deutsche Post DHL, DE)*  
[M.Luka@DeutschePost.de](mailto:M.Luka@DeutschePost.de)

*Facilitator: Jürgen Deller (Leuphana Univ. of Lüneburg)*

The presentation deals with current developments and challenges from a decidedly entrepreneurial perspective and highlights practical examples. Due to the topicality and particular nature of the of the subject matter, the presentation will not be available as an abstract.

## 20 Years of Disability and Employment Research: What's Next?

*Speaker: Adrienne Colella (Tulane Univ., US)*  
[acolella@tulane.edu](mailto:acolella@tulane.edu)

*Facilitator: Christian Dormann (Ruhr University Bochum)*

The World Health Organization (2011) reports that about 15% of the world's population has a disability. In countries with civil rights legislation regarding the employment of people with disabilities, unemployment rates are approximately twice what they are for people without disabilities (UN Enable report, 2012) and it can be assumed that rates are even worse in countries without such law. Poverty rates are also extremely higher for individuals with disabilities on a world-wide basis (WHO, 2011). The issue of disability and employment has also taken center stage on the global arena because it spans several areas of the United Nations Millennium Development Goals (MDGs) which represent eight time-bound goals designed to confront extreme poverty in its many manifestations (UN Enable report, 2012). With the recent passing of the United Nations (U.N.) Convention on the Rights of Persons with Disabilities (UNCRPD) there is

now even greater international contextual support for pursuing the interests of persons with disabilities. Despite this global focus on the issue of disability and employment, organizational psychologist and management researchers have failed to form strong international collaborations. Thus, work psychologists have a mandate to examine barriers to the employment and inclusion of persons with disabilities in the workforce, and to open up a global dialogue about their work.

In this talk, I will review my program of research on the treatment of employees with disabilities in the workforce which has taken place over a twenty year time span. I will begin with a discussion of the Stone and Colella (1996) model of factors affecting the way in which people are treated at work. This paper set up a conceptual foundation for research in this area over the next seventeen years. I will then discuss the empirical and conceptual research I have done on the topics of socialization and integration of people with disabilities into the workplace, performance appraisal and selection of people with disabilities, perceptions of accommodation fairness, and paternalism (a hidden form of discrimination). For a review of most of this work, see Colella and Bruyere (2011).

I will conclude my talk by discussing where we need to go from here focusing on such issues as aging and disability, leadership and disability, differences in definitions and perceptions of disability, and a need for comparative research on the impact of legislation and social policies on the advancement and inclusion of people with disabilities in the workforce. Finally, I will take questions from the audience.

### References

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## **Acceleration, Alienation and Appropriation at the Workplace: Some Sociological Insights into Working Conditions Past, Present and Future**

*Speaker: Hartmut Rosa (Friedrich-Schiller-Univ. Jena, DE) [hartmut.rosa@uni-jena.de](mailto:hartmut.rosa@uni-jena.de)*

*Facilitator: Christian Korunka*

The progressive speeding up of social life is a central and defining feature of modern societies. Many of the core elements of social acceleration are produced and experienced at the workplace, where the attraction as well as the pressures for speed are felt most vigorously. Thus, information and communication technologies are at the heart of the latest wave of acceleration in the 21<sup>st</sup> century. The lecture will progress in three steps: Section one reconstructs technological acceleration, the acceleration of social change and the acceleration of the pace of life as the three defining processes of modernization. Section two then identifies the logic of competition, the modern cultural ideal of an 'eternal life before death' and the self-propelling nature of the 'acceleration-cycle' as the main driving wheels of social acceleration. The last part discusses the ambivalent consequences for

working conditions and experiences. Here, the erosion of the capacity to appropriate the workplace, working-tools, processes and products, and to identify with them, appears to account for a tendency towards alienation from work and even for pathological symptoms like the burnout disease. Obviously, this provides us first and foremost with some core-ideas about how (we do) *not* (want) to work in the future – but, by implication, also with some insights into desirable working conditions.

## **“Off the Beaten Path!”: Towards A Paradigm Shift in Personnel Selection Research**

*Speaker: Filip Lievens (Ghent Univ., BE) [Filip.Lievens@ugent.be](mailto:Filip.Lievens@ugent.be)*

*Facilitator: Cornelius König (Univ. des Saarlandes)*

As one of the oldest domains in work and organizational psychology, personnel selection has a long history in Europe and strong roots in practice and measurement. Logically, selection and assessment researchers can be proud of their many of accomplishments, as evidenced by the accumulation of knowledge through an impressive array of meta-analyses related to selection procedures.

The last decade, however, there seems to be somewhat less interest in research on personnel selection. This is evidenced among others by a decrease of personnel selection articles in top journals and fewer academic departments with a primary focus on personnel selection. This begs the question as to how the personnel selection domain can refine its standard paradigms to discover new breakthroughs and innovations.

Clearly, there are various potentially valuable options and directions? Should one strengthen the collaborations with the selection practice world or should one do the reverse and

become more “theoretical”? Should one invest in the development and validation of new (technologically enhanced) selection tools or should one focus on better explaining the constructs and mechanisms underlying selection procedures? Should one strive to cumulate knowledge in the development of best (selection) practices or should one take a resource-based HR view and conduct macro organizational selection studies?

My objective in this keynote is to answer these questions by presenting my vision on the future of personnel selection research. In this keynote, I will start with delineating a general taxonomy about what constitutes a “contribution” in Work and Organizational Psychology. This framework distinguishes between contributions that are likely to have impact (i.e., knowledge shift and knowledge creation) and those that are likely to have less impact (e.g., “gap filling”, “problem solving”). On the basis of my experience as author, reviewer, and action editor, I will then apply this framework to personnel selection research.

As a general conclusion, I posit that personnel selection research needs to move away from a mainly practical, static, predictivist, instrument-driven, and micro paradigm towards a more theoretical, dynamic, explanatory, construct-driven, and multilevel one. This general premise will be illustrated with examples of groundbreaking past selection research and potentially impactful future selection research.

## **The Role of Mindfulness for Employee Health and Well-being (Innovation Award)**

Speaker: *Ute Hülshager (Maastricht Univ., NL)*  
[ute.hulshager@maastrichtuniversity.nl](mailto:ute.hulshager@maastrichtuniversity.nl)

Facilitator: *Rolf van Dick (Goethe Univ.)*

When individuals are mindful, they pay attention to present-moment events and experiences with full awareness and in a non-judgmental way (Bishop et al., 2004; Brown & Ryan, 2003). Although mindfulness has its roots in Buddhist traditions, it has been in the focus of the clinical and personality psychology literature for decades now: In clinical psychology, researchers have gathered substantial evidence for health benefits of mindfulness-based interventions in clinical (e.g. Grossman, Niemann, Schmidt, & Walach, 2004) as well as non-clinical samples (e.g. Col-lard, Avny, & Boniwell, 2008). In contrast, in the personality psychology literature, researchers have predominantly focused on natural variations in mindfulness as a trait and – to a lesser extent – as a state and their role for psychological well-being (e.g. Brown & Ryan, 2003). Interestingly however, it is not until recently that work and organizational psychologist became interested in studying mindfulness and its relation to work-related phenomena (e.g. Glomb, Duffy, Bono, & Yang, 2011).

In this keynote, I will draw on the clinical and personality psychology literature on mindfulness and combine it with established theories of work and organizational psychology to argue that mindfulness helps promoting employee health and well-being. In doing so, I will address various outcomes of mindfulness such as burnout, job satisfaction, and recovery, shed light on processes underlying these relationships, and discuss potential boundary conditions.



Results from a series of diary and intervention studies (Hülshager, Alberts, Feinholdt, & Lang, in press; Hülshager, Alberts, & Lang, in prep) will be presented in which mindfulness has been operationalized as a trait, as a state, and as an intervention, thereby warranting methodological triangulation.

For instance, a 5-day diary study revealed that trait- and state-mindfulness were negatively related to emotional exhaustion and positively to job satisfaction and that these relationships were mediated by the emotional labor strategy of surface acting. Results were replicated in an experimental field study using a self-training mindfulness intervention (Hülshager et al., in press). Studies further revealed that daily levels of mindfulness at work and a self-training mindfulness intervention were related to evening and morning levels of negative affect, fatigue and sleep quality.

Directions for future research and potential benefits of the integration of mindfulness-based interventions into workplace health promotion programs are discussed in conclusion.

## **The Aging, Age-Diverse Workforce: A Challenge and Opportunity for Work and Organizational Psychology**

Speaker: *Donald M. Truxillo (Portland State Univ., US)* [truxillod@pdx.edu](mailto:truxillod@pdx.edu)

Facilitator: *Ute-Christine Klehe (Justus Liebig Univ. Gießen)*

The workforce in industrialized countries is becoming older and more age-diverse. There are several demographic and economic reasons for this. First, health care is improving, with people living longer and staying healthier. Second, fertility rates are declining, resulting in fewer younger people relative to the older population. Third, due to the recent

economic crisis, many people cannot afford to retire at an early age, especially those who must pay for their own retirement. At the same time, governments are beginning to raise the retirement age to encourage people to work longer because retirement systems cannot afford to support people for an extended period beyond retirement. As a result of these changes, people are working until later in life, and younger and older people are working side-by-side.

There are technological changes afoot as well. On the positive side, technological advances provide opportunities for many people to work remotely, and they eliminate many physically demanding and hazardous aspects of work. At the same time, new technology will also eliminate certain types of jobs, such that workers will need to continue to adapt to work-related changes throughout their lifetimes.

The social context of workers is also changing throughout their work lives. There are social factors in the non-work context that may draw workers outside of the workplace, such as a desire to spend more time with family; or there may be factors that will encourage employees to work longer – well past conventional retirement ages – such as the desire to stay active and connected with others. There are also societal expectations and norms for what a person *should* be doing at different life and career stages.

As these economic, technological, and social contexts for workers are evolving, there are changes taking place within individual workers themselves; that is, changes are occurring in the person as he or she ages. First, workers' physical abilities may begin to decline, and they may accumulate a number of health issues, great and small. Cognitive changes take place, such as decreases in fluid intelligence, although these may be offset by increases in crystallized intelligence and accumulated job

knowledge. And there are personality changes over the adult work-lifespan, such as increased conscientiousness and decreased neuroticism.

In summary, people are now working across a broader span of their lifetimes, and within a changing societal, economic, technological, and demographic context. These processes pose three broad questions for the design of HR systems, and thus for the field of work psychology: First, compared to their younger counterparts, what are older workers *able to do* at work; second, what do they *want to do* at work; and third, what do they *expect* from work. This talk will cover how the current literature addresses each of these areas – in other words, what we know – and what questions still remain. For each of these questions, I will suggest how specific HR practices – selection, training, performance management, job design, and teamwork – might be used in the coming decades to keep workers of *all* ages satisfied, engaged, and productive.

First, we know some things about what workers of different ages are able to do. We understand that many physical abilities decline, that health may decline, and, not surprisingly, that disabilities tend to increase with age. We know there are some declines in fluid intelligence, starting in the 20s. But we also know that some of these declines may be offset by increases in other abilities such as crystallized intelligence and accumulated job skills, and that some emotion regulation skills may increase. These findings are consistent with research that shows that certain types of work performance improve with age, as do most job attitudes. The question here for work psychology is: *What can we do to maximize people's ability to adapt themselves to their work as they age, or to craft their jobs to adapt to age-related changes?*

Second, we need to understand not only what workers of different ages *can* do, but also

what they *want* from work. For example, we know that there are some differences between older and younger people in terms of their work motivation, and developmental psychology offers us a number of lifespan development theories. However, we still need to understand *how to design jobs to give people of different ages what they want from their work, either in objective terms or in terms of traditionally defined job characteristics* (for example, skill variety versus task variety; social characteristics).

Third, we need to understand what people of different ages *expect* from their work. This includes a broad range of issues such as flexible schedules, flexible location, compensation requirements, and stability in their work. While we know a bit about each of these topics in general, we still need to understand *what people expect from work at different life stages and which work and non-work factors drive these expectations*.

Given the changes in the demographics of the modern workforce, employee age will no longer be merely a statistical control variable in our research but will instead become a variable of central concern. In short, age issues will profoundly affect the way that work is done in organizations, and work psychology needs to be ready to help organizations and workers face the challenges. To answer the questions that I have described, we will often need to work beyond our comfort zones and across disciplinary borders. However, answering these questions will also provide opportunities for work psychology to have a significant and visible impact on workers, organizations, and society.

## Six Medium Term Trajectories in the Future of Work

Speaker: *John M. Carroll (Penn State Univ., US)*  
[jcarroll@ist.psu.edu](mailto:jcarroll@ist.psu.edu)

Facilitator: *Dietrich Manzey (TU Berlin)*

Although the future is by definition constituted by unknown risks and opportunities, we must project and plan for the future to have any control over what it will be. This has always been true, but it true today on a shorter time scale, with more complex and dynamic environmental features, and with a broader range of consequences.

In this talk, I reflect on six medium term trajectories in the future of work motivated in my own research and scholarship during the past four decades. Thus, the talk is a reflection on the past directed toward the unknown future. Like most aspiring futurists, I see the future by extrapolating from the present, as more strongly embodying some trends and paradigms we can identify right now.

(1) Today, people are first educated and then employed; employees are trained and then perform. As skills, knowledge, and infrastructures rapidly change, this cycle of human development becomes increasingly inadequate. In the future we will see even greater reliance on self-initiated sense making in education, training and human performance, and even more integration of work and learning activity. People will be and will expect to be responsible for learning and developing throughout their lives. The challenge for this trajectory is to better integrate learning with action, and yet to guide learning enough so that it is evoked reliably and successfully.

(2) In the past, personal identity was constituted in part by strong identity commitments to entities like nations, geographical regions, religions and corporations. In the future, we will see greater diversity and complexity in the

nature of personal identity in and beyond the workplace; for example, instead of seeing oneself as part of a business organization, a node in an organizational hierarchy, people will see themselves as relatively autonomous agents. Their collective identity commitments will be to voluntary communities at various scales. Many of these will be distributed (aka virtual) communities. The challenge in this trajectory is to understand and support communities to help people construct strong identities, obtain and provide strong social support, and become autonomous and responsible members.

(3) Today and in the past work activities are often carried out – implicitly and explicitly – in a culture of need-to-know, creating managerial modules and controlled information flows. In the future, we will emphasize awareness, transparency, and visibility; much more emphasis will be focused on enabling people to know as much as possible about what is going on that could possibly bear on their own activity. The challenge in this trajectory is to understand and support robust notions of awareness and coordination at many scales of collaborative work, including remote and nomadic work, while still ensuring security and privacy.

(4) Today many organizational policies and work practices are enacted through hierarchy and control; after (cycles of) planning and refinement, they are announced to staff and implemented. In the future, lessons of participatory work design will be embraced more pervasively and more seriously, utilizing practical knowledge of workers by empowering them to take responsibility for designing and managing their own activity. The challenge in this trajectory is to better leverage the knowledge, skills, and motivation of all stakeholders in work activity by delegating and distributing control and responsibility.

(5) It is well known that social network connections are critical to the effectiveness of workers today, however connections that violate the clusters and hierarchies defined by the organization's management are still seen as exceptional and as short-lived even if quite valuable departures from norms. In the future, leveraging multiplexed networks and weak ties for work, and establishing and maintaining broker or bridging ties in professional networks will be better supported and encouraged, and more typical. The challenge in this trajectory is to better understand how various social ties are built, utilized and sustained, but also how and why they erode, break down and become ineffective, and to provide models and tools to facilitate more effective professional networks.

(6) Career trajectories today are typically structured into a period of learning and preparation, a period of work and professional practice, and a period of retirement and leisure. In the future, these boundaries will all be much softer. More than is the case today, older people will have the opportunity to continue to contribute in a wide variety of ways, for example, working in the non-profit or public sector, starting new careers, or working as domain experts and consultants in their former career domains. The challenge in this trajectory is to understand aging as more than merely wearing out; older workers bring experience and perspective to work activity, including learning, that can be leveraged by their younger co-workers.

## **Work, Recovery - and an Attempt to Look into the Future**

*Speaker: Sabine Sonnentag (Univ. of Mannheim, DE) [sonnentag@uni-mannheim.de](mailto:sonnentag@uni-mannheim.de)*

*Facilitator: Sandra Ohly (Univ. of Kassel)*

Work becomes more and more demanding for many people. To remain healthy in the long run and to perform well, employees need to unwind and recover from the demands of work on a regular basis. In this keynote, I will present core findings from recovery research. This research has shown that specific experiences during off-job hours (e.g., psychological detachment from work as well as positive work reflection) are important for recovery. In turn, when people are well recovered, they are more engaged at work and they perform better.

Moreover, in this keynote I will address specific challenges in future work and overall life situation that may impact on recovery processes. For instance, increased acceleration, blurring of work-life boundaries as well as increased discretion over working time and places will influence people's need for recovery as well as recovery processes.

I will conclude by specifying directions for future research and highlighting practical implications.

# 1. Changing employment relations

## Invited Symposia

### **“You’re Fired! Exploring the Impact of Financial Crisis on People of Europe”**

Session Chair: *Ioannis Nikolaou (Athens Univ. of Economics and Business)* [inikol@aubg.gr](mailto:inikol@aubg.gr)

Facilitator: *David E. Guest (King's College, UK)*  
[david.guest@kcl.ac.uk](mailto:david.guest@kcl.ac.uk)

The recent financial crisis has spread almost all over Europe jeopardizing the existence of Euro and the European Union in general. Unemployment rates in many countries have surpassed 20% or even higher for university graduates. The aim of the current invited symposium is to explore the effects of the financial turmoil on employees and organizations with the participation of speakers from different European countries, who have been directly or indirectly influenced by the financial turmoil.

The topics covered in the symposium will include an exploration on the impact of the financial crisis on changing employment relationships through the lens of psychological contract based on three studies carried out recently in Greece (Nikolaou), an overview of recent research findings on job insecurity from Belgian researchers (De Witte), the Italian perspective on the crisis along with proposals on cross-national research on this topic (Fraccaroli) and finally, a study on Spanish youth unemployment experiences during the economic crisis (Peiro).

The symposium will conclude with a discussion between the authors and the audience, initiated and directed by Professor David Guest, an expert on the topic of employment relationships.

### ***Presentations of the Symposium***

#### **Financial and occupational crisis in Italy: What the W/O psychologists can do?**

*Franco Fraccaroli (Univ. of Trento, IT)*  
[Franco.Fraccaroli@unitn.it](mailto:Franco.Fraccaroli@unitn.it)

In the last few years the financial crisis is becoming a social and occupational crisis with the strong reduction of consumption level and drop in demand of employment.

The Italian situation presents some specific aspects related to the strategies adopted to handle the crisis. Three of these aspects could be analyzed considering their psychosocial features: the lengthening of working life and postponing age for retirement; the difficulty for young people to define a career strategy due to uncertainty of job position and difficulty of job entry; the risk of reduction of rights for workers in terms of safety, working hours, training and development.

In the final part of the presentation some issues related to conducting cross national, cross cultural research on these topics are considered.

#### **Context and experiences of unemployment during transition to work: moderator role of family support, initiative and passivity in career planning**

*José Maria Peiró (Univ. of Valencia and IVIE, ES)*  
[Jose.M.Peiro@uv.es](mailto:Jose.M.Peiro@uv.es), *José Ramos (Univ. of Valencia and IVIE, ES)*

Unemployment is assumed to negative impact on individual's well-being. Unemployed peo-

ple show less satisfaction and psychological health, but personal and contextual variables introduced differences. For youngsters, unemployment had effects on well-being, but less severe than for adults.

Beyond experienced unemployment, labour context could affect individual's well-being. High rates of unemployment, depressed economic indicators and long-term unemployment could affect youngsters' well-being.

In addition, unemployment experiences could interact with labour context in predicting youngsters' well-being. A restricted labour market could reinforce the negative consequences of experiencing unemployment. Nevertheless, being unemployed in a difficult context for finding or maintaining employment for everybody could buffer unemployment negative effects.

Moreover, youngsters could adopt different strategies to cope with unemployment. When facing difficulties to remain employed, youngsters could: improve qualifications to maximize their chances for getting a job or gaining resources for obtaining it in the future; remain or come back at family home, for maintaining their status quo, reducing unemployment impacts (economic needs) and gaining social support; initiate active strategies for managing their careers, demonstrating an active job searching and showing initiative; or disengage of job search, distancing themselves from their labour status concerns, protecting self-image and self-esteem and attributing responsibility to the labour market.

This contribution analyzes relationships among youngsters' well-being and their experiences of unemployment, the contextual labour market and strategies to cope with unemployment through hierarchical regression analyses. Direct and moderated effects are tested in a sample of 2000 youngsters (16-30

years-old) entering into the labour market during last five years.

### **Exploring the consequences of the financial crisis on employment relationships in Greece**

*Ioannis Nikolaou (Athens Univ. of Economics and Business) [inikol@aueb.gr](mailto:inikol@aueb.gr)*

Greece has suffered heavily from the financial crisis since 2009. General unemployment rates have rapidly increasing reaching 25% among general population and above 50% for young people below the age of 25. The impact of the crisis is huge among people and organizations in both the private and the public sector of the economy, with suicidal rates also increasing substantially. The current paper explores the impact of the financial crisis among Greek employees through three independent studies carried out during the 2009-2012 period, adopting a psychological contract perspective. The first study follows a cross-sectional design (N=301) in order to explore the impact of organizational changes and job insecurity on employees' attitudes, well-being and psychological contract and violation. The second study explores similar issues in the Greek banking sector, one of the sectors that have been through major organizational changes in Greece during the recent years, adopting a multi-level approach, with the participation of bank employees (N=205) and their supervisors (N=100). Finally the third study, which is underway, studies the role of employees' resilience and core-self evaluations in the aforementioned relationships with a sample of retail employees from a multi-national company operating in Greece. Preliminary analyses show that experiences of organizational change and perceived organizational support are associated with psychological contract breach and violation, individual characteristics, such as self-efficacy and core-self evaluations, are associated with job insecurity and



psychological contract breach, violation and fulfillment.

### Summary of recent studies on job insecurity from Belgium

Hans De Witte (KU Leuven), [Hans.DeWitte@ppw.kuleuven.be](mailto:Hans.DeWitte@ppw.kuleuven.be), Nele De Cuyper (KU Leuven), Tinne Vander Elst (KU Leuven)

This contribution presents a synthesis of research on job insecurity reported by the WOPP, the Research Group Work, Organisational & Personnel Psychology of the KU Leuven (Belgium). Topics covered include the definition of job insecurity (e.g. quantitative versus qualitative), prevalence and risk groups, and consequences of job insecurity for health and well-being, with an emphasis on new outcome variables. Additional information is presented on consequences of job insecurity for organisations (e.g. in terms of innovative work behaviours), trade unions (e.g. membership and attitudes) and political topics (e.g. voting behaviour). Specific attention is given to the differential associations of quantitative versus qualitative job insecurity, and to moderators of the job insecurity – outcomes relationship (e.g. employability), as such variables are relevant for policy as well as for practice in this field. Finally, some recent findings regarding the explanations for the harmful impact of job insecurity are presented, related to e.g. perceptions of control and need satisfaction.

#### Methodology

Overview and synthesis of published articles and ongoing research on the topic.

#### Research/Practical implication

This overview offers a point of departure for (a) the development of future studies, and (b) the elaboration of interventions (e.g. communication and participation during changes can increase control, and thus reduce strain).

## Symposia

### Job Insecurity: State of the Art 1 – Moderators

Session Chair: Hans De Witte (KU Leuven)  
[Hans.DeWitte@psy.kuleuven.be](mailto:Hans.DeWitte@psy.kuleuven.be)

#### State of the Art

Job Insecurity is an important economic stressor, with detrimental consequences for individuals and organisations. The worsening economic situation in Europe and abroad adds further to its relevance. As a consequence, a rather extensive research tradition has developed during the last decades. In this first symposium on job insecurity, scholars from a variety of European countries present some of their recent, state of the art findings on this topic.

#### New Perspective/Contribution

This symposium contains 6 papers on job insecurity and its consequences, covering data from a variety of countries (e.g. Austria, Taiwan, The Netherlands, Italy, Switzerland, Spain, and Finland). Data are analysed on different levels, from intra-individual variation, inter-individual variation, crossover between spouses, to variation between sectors and countries (multilevel analysis). The main focus is on moderators of the job insecurity – outcomes relationship. The focus on moderators is important, as this (a) helps in clarifying the underlying theoretical processes in the job insecurity – strain relationship, and (b) assists in developing suggestion for practice.

#### Conclusion and Implications for Research/Practice

A variety of practice related suggestions will be formulated, related to e.g. change communication, coping styles, employability and safety climate in organisations. Additionally, the importance of analysing job insecurity on different levels is emphasized.

## ***Presentations of the Symposium***

### **The moderating role of bi-weekly change communication in the relation between job insecurity and employee performance**

*Désirée A.T. Schumacher (Maastricht Univ.)*  
[d.schumacher@maastrichtuniversity.nl](mailto:d.schumacher@maastrichtuniversity.nl), *Bert H.J. Schreurs (Maastricht Univ.), IJ. Hetty van Emmerik (Maastricht Univ.)*

#### **Purpose**

We examine the intra-individual relation between job insecurity and employee performance, and the moderating role of time-varying change communication in this relation. Based on uncertainty management theory (UMT), we argue that the negative effects of job insecurity are less (more) detrimental to employee performance if change communication is perceived to be (un-)fair.

#### **Design/Methodology**

Bi-weekly diary data, collected over six weeks, from ninety employees facing organizational restructuring and analyzed using random coefficient modeling.

#### **Results**

Results show that all model variables vary significantly over time. As predicted, change communication moderated the intra-individual relationship between job insecurity and contextual performance. Job insecurity was positively related to contextual performance in weeks during which employees evaluated the change communication to be fair. In contrast, job insecurity was negatively related to contextual performance in weeks during which employees perceived the change communication to be unfair. No significant interaction effect was found for task performance.

#### **Limitations**

All constructs were measured by means of self-report and the possibility of reversed causality.

#### **Research/Practical Implications**

Restructuring organizations may benefit from repeatedly monitoring employees' level of job insecurity as to develop their change communications accordingly.

#### **Originality/Value**

This study contributes to research on job insecurity in two ways. First, results show that levels of job insecurity fluctuate considerably over a relatively short time span. Second, our study demonstrates that providing employees with fair change communication is particularly effective (regarding contextual performance) when uncertainty within individuals is high, but can have unforeseen negative side effects when uncertainty is low.

### **Can proactive coping improve employee well-being in the situation of job insecurity?**

*Barbara Stiglbauer (Institut für Pädagogik und Psychologie - Linz)* [Barbara.Stiglbauer@jku.at](mailto:Barbara.Stiglbauer@jku.at), *Bernad Batinic (Johannes Kepler Univ. of Linz, AT))*

#### **Purpose**

Along with the positive psychology movement, attention in coping research has shifted from reactive to future-oriented coping strategies that are used already before stress occurs and rather focus on personal growth and improving quality of life. In particular, proactive coping – an active, future-oriented coping style – has been shown to be beneficial for individuals' well-being. This paper addresses the role of proactive coping for employee well-being (happiness and distress), when confronted with job insecurity. Additionally, it is investigated whether coping efficiency would be improved, when employees are highly committed to work, i.e., when they hold high levels of work involvement.



**Design/Methodology**

The research questions were investigated within a sample of 163 Austrian and a sample of 444 Taiwanese employees.

**Results**

Proactive coping was positively related to employee well-being in the situation of low job insecurity. However, in the situation of high job insecurity, the beneficial effect of proactive coping was present only among employees with high work involvement. In the Austrian sample, the interaction was significant as related to distress; in the Taiwanese sample with regard to happiness.

**Limitations**

Results are limited by the cross-sectional design and the non-representative samples.

**Research/Practical Implications**

The findings suggest that in the situation of job insecurity the efficiency of proactive coping might depend on work-related attitudes and beliefs, such as work involvement.

**Originality/Value**

The study shows that employee work-related cognitions should be taken into account when studying the role of proactive coping for future challenges and volatility within the realm of work.

### **Is your sorrow my sorrow? Job insecurity among dual-income couples**

*Maike Debus (Univ. of Zurich, CH) [m.debus@psychologie.uzh.ch](mailto:m.debus@psychologie.uzh.ch), Justina Veseli (Univ. of Zurich, CH), Martin Kleinmann (Univ. of Zurich, CH)*

**Purpose**

Based on Hobfoll's (1989) conservation of resources framework, we investigated whether job insecurity constitutes a resource threat not only to the person experiencing it, but also to his or her spouse (i.e., crossover effects). Job satisfaction, work engagement, and turn-

over intention were studied as work-related outcomes, while relationship satisfaction was examined as a couple-related outcome. Additionally, employability and a person's income contribution to the couple's total income were hypothesized to be moderator variables.

**Design/Methodology**

Data came from 189 heterosexual dual-income couples and were modeled with the Actor-Partner Interdependence model.

**Results**

We found relatively consistent significant intra-individual relationships between job insecurity and the work-related outcomes (with the exception of work engagement which was significantly related to job insecurity among men only). However, we did not find any crossover effects to one's spouse's outcomes or any spillover effects to one's private life in terms of relationship satisfaction. Employability emerged as a moderator variable among women, while income contribution emerged as a moderator variable among men.

**Limitations**

We only investigated dual-income couples. However, it might be that crossover-effects are more likely to emerge in single-income couples (i.e., from the employed person to the non-working spouse).

**Research/practical implications**

Future research might look at single-income couples and moderator variables of which the impact differs by gender.

**Originality/value**

Although we did not find the expected crossover effects, our study overcomes an intra-individual focus on job insecurity and its consequences. Further, the results further give rise to gender and role-theoretical interpretations.

### **The impact of qualitative job insecurity on safety performance: The moderating role of safety climate**

*Margherita Brondino (Univ. of Verona; IT) [margherita.brondino@univr.it](mailto:margherita.brondino@univr.it), Beatrice Piccoli (Univ. of Verona, IT), Margherita Pasini (Univ. of Verona, IT), Hans De Witte (WOPP - KU Leuven, BE)*

#### **Purpose**

Few studies examined the impact of JI on safety outcomes, and no research to our knowledge has considered the QJI dimension, i.e. perceived threats to valued job features. Furthermore, this study considers two main components of safety performance: safety compliance and safety participation. Previous research (e.g. Probst, 2004) has already suggested that the effects of JI on SBs depend on the extent to which the organization is perceived as valuing and emphasizing safety. In particular, in this study we intend to verify three different models considering organizational, supervisor and coworkers safety climate as moderators variables. In fact, safety climate, i.e. perceptions about policies, procedures and practices relating to safety, can be considered from the point of view of the agents that perform safety activities.

#### **Methodology and Results**

The hypotheses are tested in a sample of 446 employees in a manufacturing industry of the north-east of Italy. Preliminary results of hierarchical regressions showed that only organizational safety climate moderates the effects of QJI on safety participation.

#### **Limitations**

Cross-sectional data: limit for causal interpretation. Self-report measures: potential source of common method variance.

#### **Practical implications**

Organizations may improve safety during uncertainty situations focusing on enhancing the organizational safety climate perceptions, in

order to motivate workers to actively participate in safety activities

#### **Originality**

Considering also SBs among the potential consequences of JI and thereby contribute to combine these two different areas of research.

### **Job insecurity climate in a crisis context: its potential determinants**

*José M. Peiró (Univ. of Valencia, ES) [Jose.M.Peiro@uv.es](mailto:Jose.M.Peiro@uv.es), Beatriz Sora (Open Univ. of Catalonia, ES), Thomas Hoegge (Univ. of Innsbruck), Amparo Caballer (Univ. of Valencia, ES), Wolfgang Weber (Univ. of Innsbruck)*

#### **Purpose**

Due to the financial crisis and adopted policies, concerns about job loss have probably created a job insecurity climate: job insecurity could be a collective or shared stressor. The aim of this study is to provide evidence concerning a job insecurity climate and to examine its potential antecedents.

#### **Design/methodology**

Data were collected through questionnaires. The sample was composed of 1466 employees embedded in 141 organizations from two European countries (i.e. Spain and Austria).

#### **Results**

Results showed a significant association between country, sector and organizational factors and job insecurity climate. Spain, construction sector and organizations that had adopted measures to reduce personal costs presented higher job insecurity climate compared to other countries (i.e. Austria), sectors (health, retail and education) and organizations that did not adopt this type of measures.

#### **Limitations**

Cross-sectional design and data from only two European countries.

### Research/practical implications

This study suggested a new approach for the research on job insecurity and its antecedents: the multilevel perspective. In this respect, job insecurity climate is shown as a contextual variable. Important practical implication: a job insecurity climate can emerge in organizations. Employers must take care of their climate and facilitate supportive climates for employees.

### Originality/value

Most studies have focused on individual perceptions of job insecurity. Only some studies have adopted a multilevel perspective. In the latter studies, job insecurity is considered as a contextual stressor and its consequences are examined. Our study proposes to advance in this research line, examining the potential antecedents of job insecurity climate.

### **Do job control, support, and optimism help job insecure employees? A three-wave study of buffering effects on job satisfaction, vigor and work-family enrichment**

*Ting Cheng (Jyväskylä Univ., FI) [ting.cheng@gmail.com](mailto:ting.cheng@gmail.com), Saija Mauno (Jyväskylä Univ., FI), Cynthia Lee (Northeastern Univ., US)*

Job insecurity is widespread and becomes permanent phenomenon for a lot of employees. Based on the response of 926 Finnish employees, this study aimed to investigate the direct lagged relationship between job insecurity, coping resources (job control, social support, and optimism), and employees' work (vigor at work, job satisfaction) and family outcomes (work-family enrichment). The particular interest focuses on the moderating role of job control, support, and optimism in the job insecurity-employee outcome relationships. By analyzing this three-wave longitudinal data collected in 2008, 2009, and 2010, we found that job control turned to be the strongest buffer in the relation of job insecurity

and vigor. It took about a year to show the effects. In addition, social support buffered the negative effects of job insecurity on job satisfaction and vigor at work at different time lags. Finally, the result showed that optimism did not moderate the relationship between job insecurity and employees' outcomes and there is no any interaction effects found on work-family enrichment. Implications and suggestions for future research were provided.

## **Job Insecurity: State of the Art 2 – Evolution and Explanations**

Session Chair: *Hans De Witte (KU Leuven)*  
[Hans.DeWitte@psy.kuleuven.be](mailto:Hans.DeWitte@psy.kuleuven.be)

### State of the Art

Job Insecurity is an important economic stressor, with detrimental consequences for individuals and organisations. The worsening economic situation in Europe and abroad adds further to its relevance. As a consequence, a rather extensive research tradition has developed during the last decades. In this second symposium on job insecurity, scholars from a variety of European countries present some of their recent, state of the art findings on this topic.

### New Perspective/Contribution

This symposium contains 6 papers on job insecurity and its consequences, covering data from Finland, Belgium, Italy, Portugal and Romania. Data are analysed in a variety of ways, including latent profile analysis and SEM, based on both cross-sectional and longitudinal studies. The main focus is on explanations of the job insecurity – outcomes relationship (which includes a focus on testing mediational models). The focus on explanations is an important addition to the job insecurity literature to date, that has too often been restricted to descriptive studies without attempting to uncover the explaining mechanisms.

## Conclusion and Implications for Research/Practice

First of all, a variety of possible explanations of the detrimental consequences of job insecurity are tested and discussed. A variety of practice related suggestions will be formulated, related to e.g. the way organisational and job related changes should be handled.

## ***Presentations of the Symposium***

### **Development of perceived job insecurity across two years among Finnish university staff: Associations with employee outcomes**

*Ulla Kinnunen (Univ. of Tampere, FI) [Ulla.Kinnunen@uta.fi](mailto:Ulla.Kinnunen@uta.fi), Anne Mäkikangas (Univ. of Jyväskylä, FI), Saija Mauno (Univ. of Tampere, Tampere, FI), Nele De Cuyper (KU Leuven, BE), Hans De Witte (KU Leuven, BE), Sandra Pereira Costa (Nova School of Business and Economics, Lisbon, PT)*

#### Purpose

Investigate the individual development of job insecurity (JI) and differences in vigor at work, job exhaustion and turnover intentions between the JI classes identified across a two-year period.

#### Design and methods

The questionnaire study was conducted among 926 university employees who participated in the study three times with one-year time lags. Utilizing a person-oriented approach (latent profile analysis), classes of employees with similar mean levels and mean-level changes in JI were identified. General Linear Model for repeated measures was used to test whether the JI classes differed in the outcomes.

#### Results

Nine classes of JI were identified. Three of these classes (73% of the participants) indicated stable (low, moderate, high) JI, and the

remaining six classes (27% of the participants) showed change (decreasing, increasing, curvilinear) in the level of JI across time. The JI classes differed in levels and concurrent changes in vigor, exhaustion and turnover intentions across time. High stable JI was associated with low stable vigor and high stable levels of exhaustion and turnover intentions, and a decrease in JI was associated with an increase in vigor and a decrease in exhaustion and turnover intentions and vice versa.

#### Limitations

We examined highly educated university workers among whom working on a temporary basis was common; generalization to other occupations is uncertain.

**Implications and originality:** This is the first longitudinal study on JI to take a person-oriented approach which contributed to identifying individuals at highest risk of impaired well-being as a result of long-term JI.

### **How does organisational change relate to turnover intentions? Job insecurity and attitudes towards change might play a role**

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#### Introduction

Organizational change has been related to an increase in turnover intentions among some employees. We postulate that this might be due to heightened feelings of job insecurity and negative attitudes towards the change. In the present study we test whether the effect of certain elements of organizational change (i.e. feeling informed, being actively involved and being affected by job contract change) on turnover intentions can be explained by these two factors.

### Method

Longitudinal data from employees of two Finnish universities undergoing organizational restructuring was used to test the hypotheses ( $nT1 = 1292$ ,  $nT2 = 908$ ). Of this sample 67.7% of the respondents were female, the average age was 43.31 years ( $SD = 10.77$ , range 22-66), 51.4% worked in a temporary contract. The main method of analysis was multiple mediation analysis with bootstrapping estimates of the indirect effects.

### Results

The results showed that feeling badly informed and having a stable temporary contract were related to more job insecurity and negative attitudes towards the change, which in turn were related to more turnover intentions at both time points. A longitudinal test of the mediation showed that a stable temporary contract predicted job insecurity one year later, information and active involvement predicted change-attitudes. However, only the indirect effect via job insecurity was significant over time.

### Conclusions

Overall, the study suggests that in addition to job insecurity also attitudes should be included when predicting turnover intentions in an organizational change context. The results are discussed with regard to job insecurity and organizational change literature.

### **Qualitative job insecurity and counter-productive work behaviors: The mediating role of psychological need frustration**

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### Purpose

While the majority of job insecurity research has been focussing on (the negative effects of) quantitative job insecurity (i.e., insecurity about the job as such), the current study draws attention to the implications of qualitative job insecurity (i.e., insecurity about valued job characteristics). Specifically, we investigate its relationship with counterproductive work behaviors (CWB) (towards colleagues and the organization), and examine a possible motivational mechanism underlying this relationship, namely psychological need frustration at work.

### Design/Methodology

In 2012, a total of 469 Romanian employees completed the questionnaire that included the variables analyzed in this study. Hypotheses were tested using structural equation modeling.

### Results

SEM analyses showed significant positive relationships between qualitative job insecurity and need frustration, and between need frustration and CWB. Furthermore, need frustration mediated the relationship between qualitative job insecurity and CWB.

### Limitations

The analyses are based on cross-sectional data, therefore issues related to causality and common method bias cannot be argued.

### Research/Practical Implications

Managers and employers should carefully consider job content changes, taking into account people's frustration of their psychological needs and negative behavioral reactions as a response to potential threats to job features.

### Originality/Value

To our knowledge, this is the first study that analyses relationships between qualitative job insecurity, need frustration at work and CWB.

Thereby, the added value to job insecurity research is to provide a motivational explanation for undesired behaviors at work, which is related to qualitative job insecurity.

### **A three-path mediational model to explain the job insecurity-emotional exhaustion relationship: Breach of psychological contract and distributive injustice as intervening variables**

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#### **Purpose**

We intend to increase the knowledge on Job Insecurity (JI) as a stressor by testing how and through what mechanisms JI may give rise to strain. In particular, we examined the processes underlying the relationship between JI and Emotional Exhaustion (EE), as an indicator of psychological well-being and core element of burnout, by including theories of social exchange, specifically, Psychological Contract (PC) theory and organizational justice theory, as mediators.

#### **Methodology and Results**

A total of 322 blue collar workers in Italy are used to test the hypotheses. The results found support for a model in which the effect of JI on EE was mediated by two variables, i.e. breached PC and perceived distributive injustice (three-path mediational model). Employees who were insecure perceived a breach of their PC, which led to distributive injustice perceptions, which in turn increased EE.

#### **Limitations**

Cross-sectional data: limit for causal interpretation. Self-report measures: potential source of common method variance. Characteristics of the sample: men and blue-collar workers overrepresented in comparison to the Italian working population.

#### **Practical implication**

PC breach and distributive injustice may “disturb” the balance between efforts and rewards and consequently may violate the equity principles: thus, organizations need to be careful about what they promise and regarding allocation of outcomes, especially during periods of uncertainty.

#### **Originality**

The tested model provides a theoretical framework (social exchange theories) that may lead to new insights on the JI-burnout relationship and, in general, on the nature of JI.

### **Perceived control and psychological contract breach as alternative explanations of the relationship between job insecurity and well-being, attitudinal and behavioural outcome**

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#### **Purpose**

Job insecurity has been related to mental and physical health complaints, work-related well-being (e.g. lower levels of work engagement and need for recovery), attitudes (e.g. decreased organizational commitment and turnover intentions) and behaviours (e.g. self-rated performance and OCB). Two theoretical constructs may explain these negative outcomes, namely perceived control and psychological contract breach. This study first aims to test whether both explanations mediate the relationships between job insecurity and the outcomes independently from each other, using single mediator models. Second, we aim to investigate their relative explanatory power using multiple mediator models.



### Methodology

This study was based on 2012 data of 2419 Flemish workers from different organizations and sectors. Hypotheses were tested using the SPSS-macro of Preacher and Hayes (2008) for testing indirect effects in multiple mediator models.

### Results

The overall results of the single mediator analyses showed that both perceived control and psychological contract breach mediated the relationship between job insecurity and the outcomes. The results of the multiple mediator analyses showed that psychological contract breach was the most important explanation of the negative outcomes of job insecurity, except for self-rated performance and OCB.

### Limitations

Because of the cross-sectional design, we cannot make inferences about causal relationships.

### Implications

Practitioners may prevent job insecurity to result in negative outcomes by anticipating upon (lack of) perceived control and psychological contract breach.

### Value

The study is among the first to compare multiple theoretical explanations of job insecurity outcomes, and it shows that psychological contract breach was the most important explanation.

## **Job insecurity and work-outcomes: The role of psychological contract breach and PsyCap**

*Sandra Pereira Costa (Nova School of Business and Economics) [scosta@novasbe.pt](mailto:scosta@novasbe.pt), Pedro Neves (Nova School of Business and Economics)*

### Purpose

For the past decades, job insecurity has received growing attention from researchers. However, there is a lack of studies about the processes through which job insecurity affect outcomes as well as potential mitigating factors. This study focuses on the relationship between job insecurity and individual-level outcomes (in-role performance and organizational deviance) and examines if a) psychological contract breach acts as a mediator, and if b) positive psychological capital (PsyCap) is a buffer of such process.

### Design/Methodology

To test these hypotheses, we sampled 363 employees and their supervisors from private companies in different areas.

### Results

We used bootstrapping analyses to test our moderated-mediation hypotheses. We found support for all hypotheses.

### Limitations

This research relies on cross-sectional data and therefore we advise caution with any causality inferences. It remains to be tested this model using different designs, different measures of job insecurity and other potential buffers.

### Research/Practical Implications

Knowing that job insecurity can lead to psychological contract breach which in turn can affect the outcomes, managers can take actions to prevent or alleviate this situation, such as providing accurate information, fostering honest communication, and training their employees to cope with these events. Specifically, managers should invest in employees by developing their PsyCap.

### Originality/Value

To our knowledge, this study is the first to use psychological contract breach as a mediator of job insecurity-work outcomes relationship.

Furthermore, our study provides evidence that there are resources available (i.e., PsyCap) that help employees to cope in a more positive manner with increases in job insecurity and psychological contract breach.

## A Broad Perspective on Employability

Session Chairs: *Ellen R. Peeters (KU Leuven)* [Ellen.Peeters@ppw.kuleuven.be](mailto:Ellen.Peeters@ppw.kuleuven.be), *Dorien Vanhercke (KU Leuven)* [Dorien.Vanhercke@ppw.kuleuven.be](mailto:Dorien.Vanhercke@ppw.kuleuven.be)

### State of the Art

In the last decades the economic environment has become more volatile. Lifelong job security is no longer guaranteed. Consequently, the individual's responsibility for career management and employability is expanding. Within this context, perceived employability (PE) is receiving increasingly more interest. PE concerns the individual's perception of his or her chances on the labor market.

### New Perspectives/Contribution

This symposium discusses four studies that focus on antecedents and outcomes of PE. The first study (Peeters et al.) concerns an expert study on the different dimensions of movement capital, which is traditionally seen as a core antecedent to PE. The second study (Vanhercke et al.) investigates the causal pathways between PE and well-being in predominantly lower skilled, Belgian outplacement participants. In a similar vein, another longitudinal study (Kirves et al.) examines how different PE profiles affect well-being in a Finnish sample of highly skilled university workers. The fourth study by Nelissen et al. Tests PE as a mediator between job resources and turnover intention.

### Research/Practical Implications

This symposium groups the work of four junior researchers on PE. Each study has a specific sample (education, employment status), and methodology (multidimensional scaling, longi-

tudinal studies, growth mixture modeling, mediation).

## Presentations of the Symposium

### An expert study on a theoretical framework for movement capital

*Ellen R. Peeters (KU Leuven)* [Ellen.Peeters@ppw.kuleuven.be](mailto:Ellen.Peeters@ppw.kuleuven.be), *Jill Nelissen (KU Leuven)*, *Nele De Cuyper (KU Leuven)*, *Anneleen Forrier (KU Leuven)*, *Marijke Verbruggen (KU Leuven)*, *Hans De Witte (KU Leuven)*

### Purpose

Movement capital concerns the set of individual characteristics and competencies that influence mobility chances in the labor market. The literature to date is fairly complex and scattered. Our aim is to introduce a theoretical framework for movement capital. In particular, we developed a matrix along two dimensions. The first dimension focuses on human capital; including skills, knowledge and attitudes, and social capital. The second dimension distinguishes between job-related, career-related and development-related aspects of movement capital.

### Design/Methodology

In order to test our hypothesized model, 222 items of existing questionnaires concerning movement capital were used as input for an expert study. 29 experts were asked to sort these items into the categories of our theoretical framework. This Q-sorting technique was used in order to test for similarity between the categories and to test whether the items matched with the categories. The data were analysed by multidimensional scaling.

### Results

The hypothetical theoretical framework was confirmed and simplified by developing clusters of different categories (e.g. attitudes). The number of items was narrowed down to the indicators of these clusters.



### Limitations

Some categories were represented less by the existing scales, while other categories, such as attitudes, were overrepresented.

### Research/Practical Implications

This study provides a framework for understanding movement capital.

### Originality/Value

With our theoretical framework we were able to create a structured view on different aspects of movement capital. It takes a broad view on movement capital into account.

## **The causal pathways between perceived employability and affective well-being among participants to outplacement**

*Dorien Vanhercke (KU Leuven)*  
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### Purpose

Previous studies have established a positive relationship between perceived employability (PE) and affective well-being (AWB), though mostly among the employed. The aim of this study is to investigate causality in a specific group of unemployed workers, namely those participating in an outplacement program. PE for the unemployed concerns the perceived confidence in the ability to find an acceptable job. PE may increase AWB, as PE induces a sense of control over one's career. Alternatively, AWB may lead to PE, when employers favor applicants in good mental health, or when good mental health implies a more optimistic outlook and confidence in oneself.

### Design/Methodology

Hypotheses were tested in a sample of 186 Flemish respondents at the beginning (time 1) and middle (time 2) of their individual outplacement track.

### Results

First results from a longitudinal analysis suggest that AWB at time 1 affects PE at time 2.

### Limitations

A potential limitation concerns the relatively small sample size, and the risk of common method variance owing to self-reports.

### Research/Practical Implications

For outplacement participants AWB contributes to PE.

### Originality/Value

This study contributes to the literature by probing PE in the context of outplacement, and by addressing the issue of causality.

## **Profiles of perceived employability**

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### Purpose

Skills, experience and competences are seen as determinants of perceived employability (PE) and hence PE is assumed to be stable over time. However, most of the previous studies have ignored that individual patterns of change are often heterogeneous. The aims were to investigate (1) the development in PE at an individual level with a person-centered approach and (2) relations between PE profiles and well-being.

### Design/Methodology

The data were collected in two Finnish universities (N = 926). The stability and changes in the levels of PE were followed during 2008–2010 with three measurement points. Well-being was understood as high vigor at work, low job exhaustion and high job satisfaction.

### Results

Using second-order growth mixture modeling five latent profiles were established: three

with stable (92% of the participants), one with decreasing (4%) and one with increasing (4%) PE. Furthermore, MANOVA for repeated measures indicated that higher vigor and job satisfaction and lower exhaustion were associated with higher PE.

#### Limitations

The highly educated sample may limit the generalizability of the results and be an explanation for the relatively small sizes of profiles with changing PE.

#### Research/Practical Implications

Practices for employability enhancement seem to be worth developing because high PE is related to high well-being at current work.

#### Originality/Value

This study is among the first in the employability literature which utilizes the person-centred approach. A particular feature is the three-wave longitudinal data which enabled to study the individual development of PE.

### **Associations between job characteristics and internal and external perceived employability and its contribution to turnover intention**

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#### Purpose

Perceived employability concerns the individual's perceived likelihood of obtaining and retaining a job, with the current organization (perceived internal employability) or with another employer (perceived external employability). This study contributes to employability literature in two ways.

First, while previous research investigating predictors of perceived employability focused mainly on person-centered factors, like dispositions or competences, we believe organizations can stimulate perceived employability

via challenging jobs and therefore investigate work-related antecedents: autonomy and skill utilization.

Second, we improve our understanding of how stimulating employability affects turnover intentions by investigating the mediating role of not only perceived external but also perceived internal employability and job satisfaction. In the current war of talent, organizations may wonder why they should advance their workers' perceived employability via challenging jobs if this may increase turnover. We hypothesize that autonomy and skills utilization may increase turnover intention via perceived external employability, but may simultaneously decrease it via internal perceived employability and increased job satisfaction.

#### Design/Methodology

Hypotheses were tested among 1055 Flemish employees.

#### Results

Preliminary results from regression analysis confirmed our hypotheses. Further analysis will be done by structural equation modelling.

#### Limitations

First, all data is cross-sectional. Second, this study took place in Belgium, which is characterized by low mobility rates (generalizability).

#### Research/Practical Implications

We can provide organizations with valuable information on enhancing perceived employability while at the same time retaining their employees.

#### Originality/Value

The effects of job resources on both perceived internal and external employability and turnover intentions have not been investigated before to a large extent.

## New Challenges for W&OP with non Traditional Workers

Session Chairs: *Maria José Chambel (Univ. of Lisbon)* [mjchambel@fp.ul.pt](mailto:mjchambel@fp.ul.pt), *Nathalie Galais (Friedrich-Alexander Univ. Erlangen)*, [nathalie.galais@wiso.uni-erlangen.de](mailto:nathalie.galais@wiso.uni-erlangen.de)

### State of the Art

Now like in past, W&OP is the study of human behavior in organizations that contributes to the effectiveness of organizational functioning as well as to the positive attitudes and well-being of those who work at the organizations. However, organizations have changed dramatically over the past several decades, largely in response to social trends and rapid advances in flexibility needs, that imply important changes in workers demographics, status, values, and employment relationship. Do these changes imply that workers are not as committed as they once were to work as a central activity in their lives? Do theoretical frameworks developed in the context of the standard and traditional employment relationship applicable in these new work contexts?

### New Perspective/Contribution

This symposium will address these issues to provide the report of five studies with non-traditional workers, namely older, expatriates, with disabilities and temporary agency. All studies show that these non-standard workers can develop positive attitudes and behaviors toward the organizations and a strong employment relationship, which depends from organizational strategies.

### Conclusion and Implications for Research/Practice

This symposium shows to researchers that some theoretical frameworks applied to traditional workers are also important in the management of non-standard workers. However, interesting research questions emerge within each type of the non-traditional workers that

suggest the need of adapting the theoretical frameworks, which can be useful in the establishment of meaningful distinctions between workers with different characteristics.

## ***Presentations of the Symposium***

### **Implicit theories related to self and other comparison processes on older workers**

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#### Purpose

This research suggests that people may vary in the degree to which they engage in processes that are involved in stereotyping workers in organizations. Older workers are sometimes perceived as being slower, less flexible, more resistant to change or uninterested in training. We hypothesized that these beliefs are generated on the basis of implicit theories about the fixedness versus the malleability of human attributes.

#### Design/Methodology

A total of 237 participants, under and over 40 years, were tested about self and others' perceptions of worker characteristics, attributions of failure, and people's naive theories.

#### Results

The results focus on the role of implicit theories in stereotypes about older workers and how these implicit theories are installed in older workers and the influence on their own perceptions of ability. Also, participants holding entity views - individuals who believe that people's traits are fixed- engaged in more age stereotyping than those with incremental views.

#### Limitations

The samples of younger and older workers are unequal and therefore it would be desirably if

a larger sample of older workers had been included.

#### Research/Practical Implications

The present study help to understand the role of stereotyping in terms of self-protective mechanisms associated with adaptation processes in organizations and later life.

#### Originality/Value

The present research suggests that stereotyping can be potentially reduced by means of an intervention that does not even mention stereotypes but rather alters people's beliefs about the nature and origin of their implicit theories.

### **Job attitudes in workers with disabilities: The importance of family support in addition to organizational support**

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#### Purpose

The aim of this study is to investigate the relations between organizational support and family support with job satisfaction and intention to quit among a group of workers with disabilities employed in ordinary firms.

#### Design/Methodology

The study sampled 204 workers with disabilities through a survey questionnaire. The paper used SEM analyses to test its hypotheses

#### Results

The results show that support from the organization is a significant explanatory factor in the levels of job satisfaction and this attitude performs a full mediating function between the (organizational and family) support and the intention to quit. Moreover, our results indicate that the participants in the study perceived high levels of support from their fami-

lies, facilitating the reconciliation of work and family life.

#### Limitations

The study is limited due to the dimension of sample size and selection, the self-reports data and the lack of longitudinal design.

#### Research/Practical Implications

The employees feel that an action taken by the organization to improve their well-being, involvement and contribution to goal attainment are positively perceived and add to job satisfaction. However, the influence of family support on job-related attitudes was less than that of organizational support.

#### Originality/Value

The organization need to recognizing the tasks they carry out, involving them in competence enhancement programs and including them in development plans; and the family can help facilitate their insertion in the labor market by fostering independence and autonomy, and later their professional integration and careers by contributing to the reconciliation of family life and work.

### **Human resource management practices and expatriates turnover: The mediate role of psychological contract fulfilment**

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#### Purpose

The aim of this study is to investigate the relationships among repatriates' perceived human resource management practices, psychological contract fulfillment, and turnover intention.

#### Design/Methodology

The study sampled 100 repatriates from a Portuguese company in Angola mission through a survey questionnaire. The paper used SEM analyses to test its hypotheses.

### Results

The study results showed that repatriates' perceived fulfillment of their psychological contracts was negatively related to turnover intent. The study also finds a positive relationship between human resource management practices and the fulfillment of psychological contract. Moreover, repatriates' perceived fulfillment of their psychological contracts was found to be a mediator between human resource management practices and turnover intention.

### Limitations

The study is limited due to the dimension of the sample, the self-reports data and the lack of longitudinal design.

### Research/Practical Implications

A subjective perception of psychological contract fulfillment is an important predictor of turnover intention, but this perception related with the human resource management practice practices developed during the mission. Therefore, it is important for managers to develop these practices and maintain open communications with their repatriates to ensure clear understanding of the agreement existing about the international mission.

### Originality/Value

The findings highlighted the importance of human resource system in developing positive employment relationships with expatriates.

### **Perceived insider status and organizational commitment of temporary agency workers: Organizational and individual determinants and effects on stress**

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### Purpose

Temporary agency workers (TAW) have the status of external workers in the client organi-

zation. While working side by side with core workers, their feeling of "being part of the client organization" as well as their organizational commitment may depend on the organizational integration strategies in place as well as on individual motives. We investigate the role of common discrimination and exclusion practices in the client organization (e.g. different work clothes for temps, restrictions compared to core workers), leader behavior, as well as individual differences on perceived insider status (PIS), organizational commitment (OC), and stress.

### Design/Methodology

A sample of N = 269 highly qualified TAW who belong to the same temporary staffing agency, but who were assigned to a multitude of different client organizations.

### Results

Exclusion practices and leader behavior were crucial for PIS as well as OC, whereas individual motives were less relevant. While low PIS was related to higher stress, OC was not. We discuss the difference that may lie in the "feeling of being a part of an organization" (PIS) and the feeling of belonging toward an organization (OC).

### Limitations

Database on self-reports and cross-sectional analyses.

### Research/Practical Implications

PIS as well as OC are much more determined by organizational strategies than by individual motives. This implicates a high responsibility of the organizations toward their external workers.

### Originality/Value

Whereas OC has been extensively investigated in the context of TAW, the contrary is true for PIS, which seems to be more relevant for individual stress than OC.

### **Temporary agency versus permanent workers: A multigroup analysis of human resource management, motivation and commitment**

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[fcastanheira@novasbe.pt](mailto:fcastanheira@novasbe.pt), *Maria José Chambel (Univ. of Lisbon)*

#### **Purpose**

The aim of this study is to compare temporary agency and permanent workers on the relationship between HR system of practices and worker motivation and affective commitment.

#### **Design/Methodology**

The hypotheses were tested with multiple group analysis in a sample of 1227 Portuguese call centre workers holding different employment statuses: permanent (N=699) and temporary (N=528).

#### **Results**

Results confirmed that in both the temporary agency and the permanent HR system relates positively with affective commitment toward the organization and work engagement partially mediates this relationship. However, contrary to what was expect the results showed that the relationship between HR system and affective commitment was stronger for permanent than for temporary agency workers.

#### **Limitations**

The study is limited due to the nature of the sample (TAW and permanent workers in a call centre) and the lack of longitudinal design. Neither does it analyze the TAW employment relationship with the agency.

#### **Research/Practical Implications**

An important implication of this research is that employers should not assume that their investments have not return from TAW. The development of HR practices that attained to their need and interests, while important to

permanent employees, were positively related to TAW' work engagement and affective commitment toward the client organization.

#### **Originality/Value**

The findings highlighted the importance of HR system in developing positive employment relationships with TAW.

### **Single Papers**

### **Examining the effects of changing obligations in employment relationships and psychological contract breach: A study of Greek employees**

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#### **Purpose**

Drawing on the concept of psychological contract as a framework for the exploration of the tacit understandings of employees' exchange relationship, the purpose of this research is to examine Greek employees' perceptions of psychological contract content and breach in a period of the current economic crisis.

#### **Design/Methodology**

Using a qualitative research design, twenty interviews were conducted with employees working in both the public and private sector. In the course of the interviews, participants were also asked to report critical incidents regarding particular incidents that they thought their employer had failed to fulfill an obligation towards them.

#### **Results**

The analysis indicated categories of incidents more likely to lead to perceptions of psychological contract breach. While changes were detected regarding the notion of 'job security' and 'career advancement', the study findings in regard to psychological contract content bear much similarity to previous empirical



research. Moreover, as compared to recently-detected in the sense making processes of more experienced employees.

#### Limitations

The findings of the present research may constitute the basis of future research which could focus on the new boundaries and content of the revised contract using a larger and more representative sample of employees.

#### Research/Practical

Implications Management could benefit from taking into account what employees expect to give and receive in their working relationship with the employer and therefore minimizing possibilities of contract breach.

#### Originality/Value

The study examines the concept of psychological contract as a sense making process in a sample of greek employees in a period of economic crisis, increasing unemployment and changing employment relationships.

### **Individual needs in flexibility and employment security: a qualitative approach**

*Fabrice Travaglini (HR Development Unit - Work Psychology, Univ. of Liège, BE) [fttravaglini@ulg.ac.be](mailto:fttravaglini@ulg.ac.be), Julie De Cia (HR Development Unit - Work Psychology, Univ. of Liège, BE), Jean-François Orianne (CRIS - Human Sciences Institute, Univ. of Liège, BE), François Pichault (LENTIC - HEC Management School, Univ. of Liège, BE), Isabelle Hansez (HR Development Unit - Work Psychology, Univ. of Liège, BE)*

#### Purpose

During the last twenty years, flexibilities practices have modified the work nature and lead to a decrease of employment security and an increase of health problems (Emberland & Rundmo, 2010). Reilly (1998) considers flexible work arrangements can achieve mutual advantages to employers and employees. Different forms of flexibility and different indicators of security/insecurity are proposed in

tenured employees, differences were the literature (Gareis & Korte, 2001 ; Auer, 2008) but few is known about workers needs. The aim of this communication is to develop an inventory of these needs and to analyse differences between gender, functions and activity sectors.

#### Design/Methodology

Sixty interviews (2 blue-collars, 2 white-collars, 1 supervisor, in each organization) were carried out in 12 Belgian organizations. Organizations were selected according to a methodology based on flexibility/security indicators drawn out of the company social report. We conducted a content analysis with NVivo10 on all the transcribed interviews.

#### Results

Three higher needs in term of tasks, wages and training were identified. Workers expect to use their own discretion in work organization, a variety of tasks, fixed wages and are interested with training to develop their competencies and grow up their career. Results show differences between gender, function and sector.

#### Limitations

Limitations are a not completely random sample; participants were selected by the HR Manager.

#### Research/Practical Implications

This inventory is a preliminary step to understand how the discrepancy between actual and ideal affect concerning flexibility/security is related to job attitudes and well-being at work.

#### Originality/Value

Originality is on investigating the individual needs in flexibility/security and to compare them to the indicators found in the literature.

### **Times are changing? – An interview study with social partners in the labor market about futures working life 2025**

*Susanna Toivanen (Stockholm Univ. / Karolinska Institutet, SE) [susanna.toivanen@chess.su.se](mailto:susanna.toivanen@chess.su.se)*

#### **Purpose**

The literature of futures working life and workplaces identifies several megatrends as influential for the development of working life

#### **Design/Methodology**

To get a more nuanced view of the megatrends' potential role for working life in Sweden 2025, interviews with representatives for employer organizations, union leaders and labour market authorities were conducted. Globalization was one of the themes in focus. Eleven interviews of 40 minutes of average length were performed. Focusing on the manifest content of the interviews, preliminary results are presented.

#### **Results**

Globalization was defined as the rapid increase in cross-border economic, social, technological, and cultural exchange. Competition from low income countries, and outsourcing of operations will persist. Occupational safety and health (OSH) levels are challenged as workers with lower safety awareness will be part of the labor force. Long-term initiatives and monitoring, and resources in future OSH campaigns are needed. An increased demand of highly qualified labor force is expected. Strengthening the attractiveness of Sweden as futures labor market is central. Some IPs see an increasingly multi-cultural work force as problematic while others see a possibility of improving skills level and "creativity". Competition and polarization in the labor market are foreseen to become harder. Taken together, these challenges need to be met with adjustments in the educational system and labor market policies.

#### **Limitations**

Results are based on a strategic sample which may limit the generalizability.

#### **Research/Practical Implications**

Results highlight the importance of discussing futures challenges from a longer perspective than commonly seen among labor market actors

#### **Originality/Value**

Futures studies of globalization, labor market and OSH are scarce

### **The relationship between perceived contract breach and job insecurity: The role of perceived organizational support as moderator**

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#### **Purpose**

The changing work environment causing a potential increase in perceived contract breach – defined as the extent to which employees perceive that their organizations violate the unwritten agreement between employees and organizations – and a potential increase of job insecurity. Previous research, however, indicates that the relationship between perceived contract breach and job insecurity is more complicated than what many people assume. We argue that the relationship between perceived contract breach and job insecurity is moderated by perceived organizational support.

#### **Design/Methodology**

To test the potential new understanding, this research adapted several scales from previous research. Applying a survey design, this research collected data from 185 people in a logistic service company in Jakarta – Indonesia and analyzed the hypothesized relationship using moderated multiple regressions.



### Results

Results support the hypothesized relationships.

### Limitations

This research may potentially be affected by mono-method bias,

### Research/Practical Implications

On a theoretical level, this research highlights the importance of social exchange theory in explaining organizational behavior. On a practical level, this study suggests that employers may mitigate the potential negative impact of perceived contract breach by providing more support for employees and making sure that employees are aware of those supports.

### Originality/Value

First, this research has shed a new light on the relationship between perceived contract breach and job insecurity. Second, the study has advanced the application of social exchange theory on an understanding of organizational behavior in a changing work environment. Third, this research is significant in adding the relatively limited number of rigor research on organizational behavior in Indonesian companies.

## **Can job insecurity predict deviant behaviours? Social exchange model of justice and identification processes as mediating mechanisms**

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### Purpose

Very few studies has been conducted about the influence of job insecurity on deviant behaviours (i.e., behaviours that violate organizational rules), a performance “domain” of central importance for organisational effectiveness. Research suggests that stressful working conditions may contribute to employees engaging in counterproductive work behaviours in an attempt to regain control

over their environment. Alternatively, the fear for uncertainty may lead to avoid any behaviour increasing the likelihood of job loss. We propose two mediating mechanisms to investigate JI-DB relationship. Specifically, procedural justice focuses on the resources exchange-based concerns that employees have in their organizational relationships (instrumental approach). Affective commitment is an indicator of identification with organization and refers to social-based identity explanation.

### Design/Methodology

The sample was composed of 570 Italian blue collar workers. Using SPSS-macro of Preacher and Hayes (2008), we tested specific indirect effects (multiple mediator model) and compared the two competing theories (contrasts).

### Results

Results showed that both procedural justice and affective commitment mediate the relationship JI-DB. Social exchange model and identification processes have the same “power” of explanation.

### Limitations

Cross-sectional data: limit for causal interpretation.

Self-report measures: potential source of common method variance.

### Research/Practical Implications

Managers may focus on reducing level of procedural unfairness and enhancing commitment with organizational goals as a way of preventing deviant behaviours particularly in insecure workers.

### Originality/Value

We provide two different explanations to understand the processes underlying the development of DB in insecure working conditions.

### **Does job insecurity climate effect organizational cohesiveness and antisocial behavior at work? Results from a multilevel-study in Spain and Austria**

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#### **Purpose**

Based on previous findings and theories on the impact of stress on negative affect and prosocial/antisocial behavior, the presented study inquires the relation between the job insecurity climate in organizations and reduced organizational cohesiveness as well as reduced prosocial and increased antisocial behavior at work. We argue that a high job insecurity climate could trigger self-concern and competitiveness between co-workers and decrease solidarity within organizations in the sense of a maladaptive strategy of individuals to cope with reduced control.

#### **Design/Methodology**

1435 employees from 139 organizations participated in a cross-sectional, multilevel questionnaire-study in Spain and Austria.

#### **Results**

Random coefficient models showed that job insecurity climate at the organizational level was negatively related to cohesiveness as well as prosocial work behaviors and positively related to antisocial (bullying) experiences at the workplace. However, associations were stronger in Austria than in Spain even though the levels of job insecurity climates were quite higher in Spain.

#### **Limitations**

The most severe limitation is the cross-sectional design of the study, giving a non-conclusive answer to the question whether job insecurity climate effects reduced cohesiveness, reduced prosocial and increased antisocial behavior at work or vice versa.

#### **Research/Practical Implications**

The study highlights the importance of taking the social side effects of job insecurity into account.

#### **Originality/Value**

To our best knowledge, the reported study is the first work on examining these employees' maladaptive strategies to cope with job insecurity from a multilevel perspective. Furthermore, this research was carried out in two economic and cultural contexts (i.e. Spain and Austria).

### **The impact of job insecurity on performance: Only negative effects? Explaining the nature of the relationship with overall job attitude as mediator**

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#### **Purpose**

We examine through what mechanisms job insecurity, quantitative (i.e., threats to the job as such) and qualitative (i.e., threats to valued job features) affects employees' performance (focal and contextual). Drawing on the compatibility principle in attitude theory, we proposed that overall job attitude (job satisfaction and affective commitment) predicts behavioural criteria. In particular, two predictions were compared based on social exchange theory and rational choice theory according to which JI can be an harmful stressor with negative strain reactions (behavioural withdrawal) or a challenge stressor that motivates employees to engage actively in actions coping with the threat (higher performance).

#### **Design/Methodology**

Data were collected from 322 blue-collar workers in Italian organizational context. Structural equation modeling was used to test for direct, complete mediating, and partial

mediating effects, with bootstrapping estimates of indirect effects.

#### Results

Results provide support for the social exchange model, showing the negative influence of quantitative and qualitative JI as stressor on work performance, relationships fully mediated by overall job attitudes

#### Limitations

All measures were self-report. We adopted several procedural recommendations for controlling common method biases. To measure performance-related behaviours, is however important to collect multi-source data.

#### Research/Practical Implications

Linking individual-level effects of JI (evaluation of one's job experience) to organizational performance. By communicating the organization's intentions, managers may enhance goal commitment and job satisfaction and indirectly improve employees' performance.

#### Originality/Value

To fill the gap in the literature about the effects of quantitative and qualitative JI on behavioural outcomes, in particular examining the underlying processes (mediating mechanism) to explain this relationship.

### **Do temps mess up the network? A social network perspective on the effect of temporary workers on team performance**

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#### Purpose

Research on temporary employment has primarily focused on implications for individuals and organizations. Since organizations are making frequent use of teams to structure their processes, it is also relevant to know more about implications of temporary workers on team performance. In this study, we

propose that the presence of temporary workers in teams negatively impacts team performance because temporary workers are detrimental to both advice and friendship network density within teams.

#### Design/Methodology

We sampled 253 group members and 64 group leaders from 64 work groups from the Netherlands, Romania, and Bulgaria to test our hypotheses. We used a matrix-question with a name generator to assess advice and friendship network density. Team performance is judged by the team leader.

#### Results

The results of mediation-analyses show that advice network density mediates the negative relationship between presence of temporary workers in the team and team performance. Furthermore, the presence of temporary employees increases the number of advice-based cliques within the team. The presence of temporary workers does not relate to friendship network density.

#### Limitations

The independent variable is a dichotomy since the variable is based on numbers of temporary workers in the team and is zero-inflated.

#### Research/Practical Implications

The results imply that temporary workers can have detrimental consequences for team performance.

#### Originality/Value

To our knowledge, this study is the first to examine the implications of temporary workers on team performance. It also shows the implications of hiring temporary workers on team processes such as advice and friendship networks.

### Temporary agency workers: A blessing or a curse for their permanent co-workers?

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#### Purpose

Temporary agency work promises various benefits: It allows companies to cover workload peaks, to deal with short-term absences of regular workers and to reduce personnel costs. However, hidden costs have recently shifted into focus of attention. Up to now, only few studies have investigated the influence of temps on permanent workers' attitudes and well-being. There is some evidence of negative effects on job security (De Cuyper et al., 2009) and helping behaviour among permanent workers (Broschak & Davis-Blake, 2006). We hypothesized that permanent workers show lower job satisfaction and commitment and higher psychological strain if they work side by side with temps. Furthermore, we assume that these effects are mediated by perceived job insecurity.

#### Design/Methodology

To test these hypotheses, we used a sample of blue-collar workers of a manufacturing enterprise (N=113; 60% worked together with temps). Demographics and various job characteristics were included as control variables.

#### Results

Regression analyses partially support our hypotheses. Working together with temps has a strong negative effect on the permanent workers' job satisfaction. Contrary to our expectation, job insecurity has no mediator effect.

#### Limitations

Data were collected in only one organization. The level of employees' job insecurity was very low (restriction of variance).

#### Research/Practical Implications

Our results imply that even if job insecurity is low, the use of temps can have some negative effect on permanent workers' attitudes.

#### Originality/Value

The study is the first to investigate the influence of temps on permanent workers' job satisfaction, commitment, and strain while controlling for job characteristics.

### The role of career development factors in job insecurity perceptions

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#### Purpose

This paper explores the interrelationship between career development factors and job insecurity.

Job insecurity is a modern times phenomenon, which manifests in several forms (e.g. qualitative and quantitative job insecurity) and is thought to have a detrimental effect on employee performance and well-being. Moreover, a number of studies allow for an assumption of 'spread insecurity', which states that insecurity perceptions may not restrict to the job itself, but extend into concerns about losing latent job benefits, i.e. the indirect social or material advantages an employment provides. However, it is not clear how various forms of insecurity are related and what factors might help to reduce job insecurity strength or breadth.

#### Originality and value

Based on Career Construction Theory, this study analyzes the role of career development factors (i.e. adaptability and employability) in reducing job insecurity.

### Methodology

Specifically, we aim to determine whether qualitative/quantitative job insecurity and concerns for losing latent job benefits are related, and to explore whether this relationship is moderated by career development variables.

205 Lithuanian employees participated in the study. They were asked to fill out a composite questionnaire.

### Results

Multiple links between the above mentioned variables were obtained. Qualitative and quantitative job insecurity appear to be related to concerns about losing latent job benefits, which in turn are partially predicted by career variables.

### Limitations

The results are limited to Lithuanian white-collar employee sample.

### Research/Practical Implications

The study draws attention to the importance of personal career development factors in discussing the nature of job insecurity perceptions.

## **The power of I-deals in creating organization commitment: introducing the role of perceived uniqueness of the deal.**

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### Purpose

I-deals are non-standard arrangements about the terms and conditions of employment that employees negotiate with their superiors that are beneficial to both the employee and the employer. Social exchange theory predicts that when employers accommodate employment conditions to employee needs, employees in turn experience reciprocal obligations towards their employer, resulting in higher

levels of organizational commitment. We argue that 'non-standard' evaluations expand beyond the borders of the own organization. Only when employees evaluate that their i-deal is unique compared to what can be obtained in other organizations, they will show more commitment.

### Design/Methodology

In the first half of 2012 we sampled 572 employees in different sectors who indicated that individual negotiating on terms and conditions of employment occurred in their organization. Of these employees, 97 indicated that they actually negotiated an i-deal.

### Results

Analyses showed no significant relationship between receiving an i-deal and employee commitment. However, the level of perceived uniqueness of the i-deal significantly predicted employee commitment.

### Limitations

Sampling strategy to find people with i-deals is suboptimal.

### Research/Practical Implications

I-deals lead to commitment only when employees perceive that such arrangements are difficult to obtain in other organizations. This implies a need for additional theory. A practical implication is that offering i-deals as a strategic employer branding strategy is only successful if the content of the i-deal is considered as genuinely unique.

### Originality/Value

Previous research found mixed results for the effect of ideals on commitment. Our findings illustrate that while i-deals can be non-standard within organizations, for employees their value mainly depends on the uniqueness outside the organization.

### **Psychological contracts in the context of organizational change; How employee obligations are being influenced by the fulfillment of organizational obligations**

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#### **Purpose**

This topics of this study are: A) if and how the fulfilment of employer's obligations affects the perceived obligations of the employee and B) if and how the fulfilment of the employers obligations is being affected by organizational change (organizational change defined by 5 characteristics: frequency, impact, type, former experiences and justification of change).

#### **Design/Methodology**

Respondents (3000) of several organizations filled in an online questionnaire. Statistical analyses were used to test the effect of the fulfilment of the employers obligations on the perceived obligations of the employee and to test the effect of the change characteristics on the fulfilment of the employer obligations.

#### **Results**

The preliminary results show that the perceived obligations of the employee are affected by the fulfillment of the employers obligations. The fulfillment of the employer's obligations was affected by several change characteristics used in this research.

#### **Limitations**

The study concerns the experience of mostly highly educated employees who are most confronted with organizational change. A further limitation is the cross sectional character of the study.

#### **Research/Practical Implications**

This study indicates that the fulfilment of the employer's obligations affects the perceived obligations of the employee and shows that

several characteristics of change affect the fulfilment of the psychological contract and others don't. This is also important for practitioners working in the field of organizational change.

#### **Originality/Value**

Empirical research on the effects of organisational changes on psychological contracts is scarce. Research on the effect of employee sense-making of change, in this study operationalised as justifications of changes, on PC fulfilment appears almost non-existing. Thereby, this study offers valuable insight into the research on employment relationships in the context of change.

### **Antecedents and outcomes of successful I-deal negotiation during the early career: A longitudinal study**

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#### **Purpose**

Both organizations and employees experience a growing need for customization and individualization of various aspects of the employment relationship (Rousseau, Ho, & Greenberg, 2006). As such, individual negotiated employment arrangements, also known as idiosyncratic deals or I-deals, are becoming widespread in today's workplace (Lawler & Finegold, 2000). In this study, we distinguish development I-deals from flexibility I-deals and assess the role of psychological contract expectations, proactive career behavior and work centrality at time of graduation as antecedents of successful I-deal negotiation during the early career. Second, we investigate the interrelatedness of both development I-deals and flexibility I-deals with three employee outcomes (work engagement, job satisfaction, career satisfaction).



**Design/Methodology**

The paper discusses the results of a two-wave longitudinal study among graduates. The first data collection wave took place in the final weeks before graduation (May 2010), whereas the second data collection wave was organised in May 2012. This resulted in a sample of useful and matched responses from 168 respondents.

**Results**

The model was tested with structural equation modelling and the results were supportive.

**Research/Practical Implications**

In line with previous research (De Vos, De Clippeleer, & Dewilde, 2009), our work once again stresses the importance of a proactive career attitude on behalf of the employee.

**Originality/Value**

By using a longitudinal design, this study set out to determine the antecedents and outcomes of successful I-deal negotiation during individuals' early career. To our knowledge, this is the first empirical study to investigate the interrelatedness of employee characteristics at time of graduation and successful I-deal negotiation during the early career.

### **Exploring the assets that make employees more employable: Results of a survey conducted in Switzerland**

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**Purpose**

In the economy of incertitude characterizing our contemporary society, the ability to value one's assets for retaining or changing employment becomes fundamental. We developed a questionnaire to measure employability, or the set of characteristics supporting career mobility between and within organizations (Fugate, 2006). The questionnaire includes five contextual and individual factors

that emerged from the literature as important aspects of employability: openness to change, knowledge of the job market, proactivity, physical and psychological resources, current level of work engagement. We also conducted a comparison of results collected in 2005 to show how employability has changed within the last years.

**Design/Methodology**

The questionnaire was validated on a sample of 1084 employees working in Switzerland. Data of 2005 included 701 employees working in Switzerland.

**Results**

We validated the 5 factor structure of the questionnaire with Principal Component Analysis. Confirmatory Factor Analysis showed that a multidimensional model of employability fits the data better than one-factor model (see also Fugate & Kinicki, 2008). The comparison with 2005 show that employees are overall more satisfied with their career evolution and current position. However, they appear less oriented to achieve goals and less flexible in changing work conditions. Physical and psychological resources deteriorated and female employees appear significantly lower in employability than their male colleagues.

**Limitations**

Results apply to a Swiss sample and may reflect the employment situation of Switzerland.

**Practical implications**

The questionnaire helps employees to realize which aspects of themselves should be developed to be competitive on the job market.

**Originality/Value**

Scientific approach; sample that includes employees from different geographical areas of Switzerland.

### **The longitudinal effect of employability dimensions on young university graduates' job quality: The mediating role of perceived employability**

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#### **Purpose**

Employability dimensions proposed by Fugate et al. (2004) have been identified as important personal factors that could help young university graduates to get high quality jobs after graduation. On the other hand, the literature indicates that these employability dimensions could also promote graduates' perceived employability. Finally, perceived employability has also been related to obtaining high quality jobs in terms of some indicators.

Taking this into account, the aim of this study was threefold. First of all, to identify the influence of employability dimensions on graduates' perceived employability. Secondly, to identify the influence of perceived employability on job quality (salary, professional status and job satisfaction) ten years after graduation. And thirdly, to test the mediating role of perceived employability in the relationship between employability dimensions (human capital, career identity and personal adaptability) and job quality.

#### **Design/Methodology**

The study was based on a longitudinal sample of 343 university graduates who were interviewed two and ten years after graduation. The hypotheses were tested by means of hierarchical regression analyses.

#### **Results**

In general, the results obtained showed that employability dimensions measured two years after graduation were significantly related to

job quality ten years after graduation. Moreover, the relationship between most of the employability dimensions and job quality indicators were partially mediated by perceived employability.

#### **Research/Practical Implications**

Our results have theoretical implications for employability concept and practical implications for graduates' employability improvement.

### **Longitudinal analysis of the relationship between organizational and union commitments in a sample of Spanish shop stewards**

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#### **Purpose**

This study contrasts three models on dual commitment. The first model considers organizational commitment as an antecedent of union commitment, the second model proposes a reversed relation and the third model hypothesizes a reciprocal influence. Previous evidence on this topic is mixed.

#### **Design/Methodology**

A two-wave field study was conducted on one of the two main national trade unions in Spain. The study used a survey method. A total of 1148 shop stewards completed the questionnaire in the first wave (T1). Of these 1148 shop stewards, 676 completed the survey again 12 months later in the second wave (T2).

#### **Results**

The cross-lagged regression analysis showed that organizational commitment at T1 significantly and negatively predicted union commitment at T2. No significant relationship was found between union commitment at Time 1 and organizational commitment at T2.



**Limitations**

The study could be replicated within a sample from a different cultural and geographical context.

**Research**

The results suggest that the idea of dual commitment should be reconsidered.

**Practical implications**

The results questioned the rationale of the anti-union policies implemented by some companies to prevent a reduction of employees' commitment. In addition, the evidence obtained suggests that unions recruitment campaigning should be specially oriented to those employees from firms where working conditions are related to low levels of organizationally commitment.

**Originality**

To our knowledge, this study is the first one to analyze longitudinally the relationship between union and organizational commitments.

### **“Remember me and smile”: Helping and voice behaviors in a decaying Portuguese hospital**

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**Purpose**

This study examined Organizational Citizenship Behaviors of the globality of workers from a decaying hospital, where services have been closing down progressively and shut down is considered likely, but not certain.

**Design/Methodology**

The study was conducted with a convenience sample from a Portuguese hospital through a questionnaire (N=140) composed by descriptive demographic items (age, gender, etc), questions regarding perceived job insecurity

and Van Dyne and LePine's (1998) Helping and Voice Behaviors Scale. Structural Equations Modeling was used to assess the impact of perceived Job Insecurity in the different components of Extra-role Organizational Citizenship Behavior Scale we used.

**Results**

Results show that concern about one's own professional future is not significantly related to either Helping or Voice Behaviours, but concern about the organization's future is significantly related to both.

**Limitations**

his study was conducted using a convenience sample in a relatively small context

**Research/Practical Implications**

This study reflects upon the impact of perceived job insecurity in one aspect of the relationship of workers with the organization that goes beyond their work role: extra-role organizational citizenship behaviors. Results from this study support and further some aspects of the Social Exchange Theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960).

**Originality/Value**

Job insecurity is a major topic in the current state of the Economy and it will most likely increase in the next years. Realizing the impact of Job insecurity in different aspects of how workers may behave to benefit the organization in turbulent times will become crucial to companies in the years to come

## **Posters**

### **Are we overeducated? Exploring undergraduates and their families employability perceptions**

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### Purpose

Organizational change processes have led to a high flexible labor market condition. Employees react to this condition by increasing their qualification in order to find a better collocation in the labor market (Ortiz, 2008).

This study aimed at investigating overeducation (Freeman, 1976) and employability (Rothwell et al., 2008) perceptions in two samples: on one hand, it has been explored a group of senior-year students and their perceptions about their future employability. On the other hand, the students were compared to their family of origin.

### Design/Methodology

An ad hoc self-report questionnaire have been adapted to measure self-perceived employability, university commitment and ambition (Rothwell et al., 2008) in both the samples; academic performance - students' sample - level of qualification, type of job (objective measures of overeducation), overeducation perception and earnings - family of origin sample - have been also surveyed. Having used university guidance services was also taken into account.

### Results

Results indicate a difference in students' employability perceptions depending on whether their family of origin was overeducated.

### Limitations

This study have some limits: (a) the sample is a convenience sample made up of psychology students; (b) self-report measures have been used principally; (c) it is a cross-sectional study.

### Research/Practical Implications

The lack of decent works may lead to a over-qualified workforce. The implementation of vocational guidance services may reduce the work-qualification mismatch and the qualifica-

tion inflation (Green et al., 1999; Levidow, 2002; Verhaest and Omeij, 2004, 2006).

## Why do employees stay when they had a strong intention to leave?

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### Purpose

Until now, traditional turnover models generally focus on different factors as antecedents of the turnover process. Many studies have investigated employees' intention to leave, which is considered the most important predictor of turnover behavior. Yet, not all employees with a strong turnover intention, will actually leave the organization. Building on the integrative model of Maertz and Campion (2004), we investigated the different motives causing employees with a strong turnover intention, to actually stay. Furthermore, most important emotions for people with an intention to leave were investigated. Accordingly, the research question was: why do employees change their turnover intention into a decision to stay?

### Design/Methodology

To answer this research question, we interviewed 40 employees from different Dutch organizations using a semi-structured interview format. These qualitative data were analysed accompanied with a topic list.

### Results

Affective and alternative forces were the most important reasons for deciding to stay in spite of wanting to leave.

### Limitations

Due to the limited sample and the qualitative nature of the study, generalizability may be limited.

**Research/Practical Implications**

Companies should take notice of important motives in employee decision-making in order to lower turnover rates.

**Originality/Value**

This study extends turnover research by focusing on changes in turnover decisions.

**Causes and effects of permanent reachability**

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**Purpose**

Little is known about the causes and effects of "reachability". This study wanted to find out more for both working hours and leisure time.

**Methodology**

430 employees were questioned via questionnaire covering the following issues: nature and frequency of reachability; reasons for (non-)reachability; impairing strain; and scope for prevention.

**Results**

Approximately one in seven of the employees who are frequently or always reachable considers themselves subject to strong or very strong stress. Respondents find it practical to be reachable, and consider it important to be kept up to date on the latest developments. Many of those questioned are reachable in their leisure time because they enjoy working. Those who are not reachable consider a lot of the discussion to be unnecessary. Overall, the negative effects of reachability tend to be regarded as minor.

**Limitations**

Whether employees who are continually reachable but who do not consider themselves to be under stress really are not subject to stress or are merely not conscious of being

so must be examined. The possible effects over the long term must also be surveyed, and not only with reference to subjective assessments.

**Practical implications**

Prevention measure should be taken: Promising seems for superiors to tell their staff that they do not always need to be reachable.

**Originality/value**

To our knowledge, this study was the first to poll the causes and effects of reachability for both working hours and leisure time. The findings are important for the prevention work.

**Why employees vote to ratify union contracts**

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**Purpose**

To examine five models of motivational antecedents of contract ratification voting: members' exchange relationships with their employer, with their union, with a joint employer/union entity, economic circumstances, and union militancy.

**Design/Methodology**

We used self-reports of votes whether to accept their labor agreement from 1180 employees collected separately after the predictors.

**Results**

All five models explained variance in voting behavior, with the economic model explaining the most total variance (17%) and the militancy model explaining the most unique variance (5%). Together, the models explained 34% of the variance. Significant predictors were: organizational commitment (employer-relations), union loyalty (union-relations), union-management relations and procedural fairness (joint entity), pay equity and per-

ceived employment mobility (economic), and strike instrumentality and strike propensity (militancy).

#### Limitations

Our measures were narrow, the setting had many part-time employees, and there was a long time span between assessing the predictors and the ratification vote.

#### Research/Practical Implications

Increasing organizational commitment, union loyalty and improving union-management relations helps get a contract ratified. Member militancy is important for unions, but may have unintended consequences in hindering ratification.

#### Originality/Value

We extended prior literature with two new models of motivational antecedents to explain ratification behavior; 1) a joint attribution exchange model, emphasizing that many aspects of working conditions may be attributed to the combined entity of employer/union, and 2) a model of member militancy, reflecting that greater militancy leads to less ratification support. Further, we develop a new theoretical interpretation of economic model variables in bargaining using Conservation of Resources theory. We also identify new constructs to explain ratification behavior.

### **The role of self-efficacy, proactivity, engagement and locus of control on employability of young professionals from a country in economic growth**

*Mariana Bargsted (Universidad Católica del Norte, Chile) [bargsted@ucn.cl](mailto:bargsted@ucn.cl)*

#### Purpose

Employability, as well as career, can be understood as a dual phenomenon, with an objective and a subjective component. The aim of this study was to identify the role of self-efficacy, proactivity, engagement and locus of control on both elements of employability of

young professionals from a country in economic growth.

#### Design/Methodology

Using a quantitative methodology, we developed a study with 285 Chilean young professionals. The participants answered a questionnaire related to employability with two main dimensions: objective and subjective employability, including actual and past employments, training and post graduate studies, and also satisfaction with their objective work conditions and the perceived opportunities to develop new competences and grow. We also asked them to answer four scales to measure work self efficacy, proactivity, locus of control, and engagement.

#### Results

80% of participants had a job related to their profession and had no trouble finding a job. Consequently, there were no significant relationships between psychosocial variables and objective employability. However, there was a strong positive association between subjective employability and self-efficacy, proactivity, engagement, and internal locus of control.

#### Limitations

This was a transactional study, so is important to develop follow-up studies to monitor changes in employability throughout life.

#### Research/Practical Implications

We can understand the possible effect of improving these beliefs and attitudes for employability in dynamic and growing economies. This allows us to implement a broader set of interventions in career management.

#### Originality/Value

In this study we present a broader view of employability, with an objective and subjective component. Furthermore, we find empirical association between psychosocial variables and subjective employability.

### **Emotional intelligence and employability in Italian university students**

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#### **Purpose**

This study investigated the relationships between emotional intelligence and employability in Italian university students.

#### **Design/Methodology**

The Bar-On Emotional Quotient Inventory (Bar-On EQ-i) and the Self Perceived Employability for Students scale (SPES) were administered to 156 Italian university students. Pearson's  $r$  correlations and multiple regressions were carried out.

#### **Results**

The results showed positive relationship between emotional intelligence and employability.

#### **Limitations**

A first limitation was the impossibility of generalizing the results obtained in a specific groups of Italian university students. Another limitation was the exclusive use of self-report measures in particular regarding emotional intelligence

#### **Research/Practical Implications**

It would be interesting to replicate the study on samples more widely representative of the Italian situation and on different samples (e.g. workers, adults faced with transition in their lives). It would be useful to administer along with the self-report measures other instruments to assess ability-based emotional intelligence. At an intervention level it is possible to highlight the usefulness of specific training aimed at enhancing emotional intelligence in order to increase employability.

#### **Originality/Value**

Since emotional intelligence is a variable that can be improved through specific training, the study of relationships between emotional intelligence and employability can delineate new areas of future research and intervention.

### **Towards an understanding of the dynamics in contemporary work relationships**

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#### **Purpose**

The paper aims to explain the dynamics underlying virtual work relationships. Organization and employee face the challenge of how to maintain reciprocal trust given the reduced amount of personal interaction. Central to the study is an understanding of why and how reciprocal trust might vary due to differences in imposed structure and exercised control by the supervisor and the subordinate's remaining independence.

#### **Design/Methodology**

15 interviews with employees from different industries facing different degrees of virtuality have been conducted. Applying template analysis, the general nature of such contemporary work relationships is investigated. More specifically a close look is taken on how different combinations of exercised control and imposed structure by the supervisor translate into different levels of reciprocal trust.

#### **Results**

The study suggests that too much control exercised by the supervisor can be a source of contract breach perceived by both the supervisor and the subordinate. This might initiate a vicious circle of reciprocal trust decline.

#### **Limitations**

Construct and internal validity of some of the interview questions must be regarded as low.

Also, the interviews have been conducted at one point in time. Therefore, no reliable claims about feedback effects can be made

#### Research/Practical Implications

Clear and unambiguous communication is proposed as a way to forego the identified vicious circle. Further implications regard managerial trustworthy behavior, personnel selection decisions and highlight the need of a minimum amount of face-to-face interaction.

#### Originality/Value

The study is one of the first combining concepts of trust and psychological contract literature into one comprehensive framework and applying it to the dynamics in virtual work relationships.

### **Don't fear the crisis. An Italian study**

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#### Purpose

Since 2008, a deep financial crisis started in the United States and widespread around the world (Spence, 2009) and scientists expressed worry about this crisis pointing out potential negative health effects by creating a collective fear and panic. The aim of this study of fear of the crisis is to examine its impact on mental health. We are also interested in identifying whether fear of the crisis. Has an indirect relationship with health through social support and stress of the work environment. The present study wants to test further whether full or a partial mediations model best fits the data.

#### Design/Methodology

Data collection took place between 2010 and 2011. During this period several private organizations that comprised 1236 employees participated in the study. Structural equation modeling was used.

#### Results

It was found that both social support and job stress fully mediate the relationship of fear of the crisis with health, with all fit indices meeting their respective criteria, and with all path coefficients being significant.

#### Limitations

Crisis perception and crisis emotions are little researched. Consequently, this issue should be investigated further in a more representative sample.

#### Research/Practical Implications

Implications for communicating crisis among employees are discussed.

#### Originality/Value

Fear of the crisis appeared to be an important innovative construct for the employment relations

### **Sensation Seeking Scales Form V and job insecurity as predictors of intrinsic and extrinsic job satisfaction in China**

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#### Purpose

China has experienced a fast economic growth co-occurring with increased westernization and job insecurity (JI). Sensation seeking (SS) is of special interest because it might be closely related to consumption behavior and hedonistic values. To investigate the relation between SS and JI, a newly translated and adapted Chinese sensation seeking scale, form V (SSS-V) was applied. JI was measured by means of the degree of non-governmental vs. governmental occupations, assuming that more governmental occupations have more pronounced JI. It was hypothesized that higher sensation seekers concern less about JI for the sake of expe-



riencing varied and novel tasks in their jobs. Moreover, we explored the relation of sensation seeking and job satisfaction.

#### Design/Methodology

Chinese employees (N=337) were tested whether the SSS-V items reflected a hierarchical model consisting of a global and four specific factors by using structural equation modeling. A multiple indicator–multiple cause (MIMIC) model was calculated to examine our main hypotheses.

#### Results

Chinese SSS-V items confirmed the hypothesized hierarchical model of a global factor and four-subfactors. A MIMIC-model indicated that higher sensation seekers had more insecure jobs and higher job satisfaction.

#### Limitations

Further investigations in other Chinese samples and other countries would be of interest.

#### Research/Practical Implications

JI can be a stressor in that lower sensation seekers demonstrate lower job satisfaction whereas in higher sensation seekers JI might be taken into account to satisfy their need for varied and novel tasks.

#### Originality/Value

Considering individual differences in SS extended the understanding of employees' JI and job satisfaction in China.

### **The objective engineer and the subjective manager: An empirical study of engineer's perceptions on management and managing tasks**

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#### Purpose

Engineers are moving into higher management and gaining both place and formal competence. However, there is to understand the scope and limits of this process and its implications both for efficient management and for the careers and professional lives of engineers.

#### Design/Methodology

We used a case-study methodology with a quantitative analysis of questionnaires to a wide sample of engineers emphasizing the socially constructed nature of what may be subjective yet assumed to be objective in the relation between engineers as employees and engineers as managers.

#### Results

Engineers perceive that the institutionalization of competences is far more important than the acquisition of the competences themselves. We have identified the reasons why some engineers enter management courses and why others don't. We suggest that this relates to the context of whether or not there is 'psychological contract' in perception of work relationships considering roles and tasks..

#### Limitations

This study was made with Portuguese engineers. Earlier studies found variations on the relation between management and engineering from harsh to soft in different cultures with different social dynamics. It should be applied to different cultures.

#### Research/Practical Implications

Managing objective and subjective careers requires knowledge of individual's perceptions of both tasks and jobs. Commitment, satisfaction, motivation and the ongoingness of the employment relation are truly affected by these variables and knowing this is of the utmost importance for managing with people.

#### Originality/Value

Almost every study on engineers and management focus on the relations between two professions (the engineers and managers). This study focuses on engineers as managers, searching for the frontiers of professional identities



## 2. Employee Well-being

### Invited Symposia

#### Social Identity and Stress in Organizations

Session Chair: *Rolf van Dick (Goethe Univ.)*  
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##### Purpose

This symposium brings together researchers from different countries and a variety of institutions. The purpose is to provide first a theoretical introduction into the Social Identity Model of Stress and then to present empirical evidence for the main assumption of a positive link between identification and well-being.

##### Design/Methodology/Results

In the first paper, van Dick & Müllner present evidence from a cross-sectional study of airline personnel confirming positive relations between identification, social support and well-being among pilots and flight attendants. The next presentation by Frisch et al. test the assumptions in two laboratory experiments with students who undergo the Trier Social Stress Test. Wegge et al. present an experimental study with call center agents who are exposed to friendly versus rude customers. The fourth presentation by Escartin et al. discuss relations between identity and bullying on an individual and a group level in a large sample of Spanish employees. Finally, Avanzi et al. present results of two field studies (cross-sectional and longitudinal) showing curvilinear relations between identification, workaholism and well-being.

##### Research/Practical Implications

Overall, the presentations confirm the general social identity assumptions in the field and the laboratory. But they also transfer the model to the group level and point to potential downsides of identification.

##### Originality/Value

The symposium combines a range of different approaches (field and lab studies, cross-sectional and longitudinal designs) and dependent variables (general well-being, stress, cortisol measures, bullying) and therefore provides a multi-perspective view on the usefulness of the Social Identity Model of Stress.

#### ***Presentations of the Symposium***

##### **High up in the air: Social identification, social support and stress among aircraft staff**

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##### Purpose

Aim of the study was to test the central predictions of the Social Identity Stress Model of a mediating link between social identity with teams and organizations, social support and stress.

##### Design/Methodology

A cross-sectional survey was conducted with 440 flight staff (250 pilots and 190 flight attendants). Participants completed questionnaires on their identification with the airline and the flight crew on their most recent flight, social support by organization and crew members and stress in general and during the last flight.

##### Results

The results partly confirmed hypotheses. Whereas simple correlation analysis showed the expected relations between all variables,

structural equation analyses could only demonstrate a mediated link for organizational identification, organizational support and general stress but no such indirect effect for crew identification, crew support and specific stress. Crew identification, however, was directly (negatively) related to stress during the last flight.

#### Limitations

The sample, while large suffered from a gender imbalance – as typical for the industry, almost all pilots were male, while almost all flight attendants were female so that subgroup analyses were difficult because of a confound between gender and task.

#### Research/Practical Implications

In general results confirmed social identity predictions and showed that a strong identification can help individuals cope with stressful events.

#### Originality/Value

This was the first time that a sample of pilots and flight attendants were used to test the social identity model of stress. This highly specific sample comprises both extremely well trained and well paid personnel and also relatively low paid and less trained staff.

### **“I feel bad”, “We feel good”? – Emotions as a driver for personal and organizational identity and organizational identification as a resource for serving unfriendly customers**

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#### Purpose

The social identity approach is used to demonstrate how personal and organizational identity is affected by emotions at work and that organizational identification can function as a valuable resource in coping with stressors.

#### Design

We analyzed data from an experiment with 96 call center agents to investigate relationships between positive and negative emotions, identification, and strain. Positive and negative emotions were induced by simulated customers who either behaved in a friendly or a rude way. Organizational identification was assessed with a questionnaire and personal identity salience was measured using video data by counting how often agents said “I”. Strain was measured through self-reports of emotional dissonance and by assessing immunoglobulin A (IgA) concentration in participants’ saliva.

#### Results

The findings showed that organizational identification was higher in conditions with positive emotions and was reduced by induction of negative emotions. Moreover, organizational identification functioned as a buffer against stress with respect to emotional dissonance and IgA-levels when agents communicated with unfriendly customers. Conversely, personal identity salience was induced by negative emotions and did not make a positive contribution to the coping process.

#### Limitations and Practical Implications

It remains to be seen how strong these effects are when examined in real world organizations. Nevertheless, our findings reveal a new causal link between emotions and identification at work. They indicate that fostering organizational identification by inducing positive emotions helps to reduce strain in call center work.

### **Social identity as a buffer of neuroendocrine stress reactions**

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### Purpose

Previous research shows that social support in threatening situations can be a mixed blessing since it is not always perceived as supportive or may even impair well-being. Building on the social identity approach, we proposed that social support buffers neuroendocrine stress reactions only if a sense of shared social identity is evoked. This hypothesis was tested in two experimental studies.

### Design/Methodology

In both experiments, the salience of social versus personal identity was manipulated before participants were exposed to stress. Stress was induced by employing the Trier Social Stress Test (TSST). As a biomarker of stress, salivary cortisol was measured. In Study 1, participants were exposed to stress in groups of four. In Study 2, each participant was exposed alone to either a supportive or an unsupportive TSST audience.

### Results

The results of Study 1 show that being part of a group buffers neuroendocrine stress reactions only if group members develop a shared social identity. Preliminary results of Study 2 suggest that a supportive TSST audience buffers neuroendocrine stress only if a shared social identity among the participants and the TSST audience is established.

### Limitations

No effects were found for self-reported stress.

### Research/Practical Implications

Rather than attempting to deal with stress-related problems at a personalized level, practitioners are advised to create teams that provide their members with a strong sense of shared social identity.

### Originality/Value

Our findings provide the first experimental evidence for the idea that social support buff-

ers neuroendocrine stress reactions only if a shared social identity is salient.

## **Social identification on workplace bullying: A replication and extension study**

*Jordi Escartín (Univ. de Barcelona)*

*jordiescartin@gmail.com, Johannes Ullrich (Goethe Univ.), Dieter Zapf (Goethe Univ.), Elmar Schlüter (Univ. Cologne), Rolf van Dick (Goethe Univ.)*

### Purpose

Social identification has been argued to reduce or buffer social stressors, such as workplace bullying. However, empirical research on social identification and workplace bullying is relatively scarce. This multilevel investigation empirically supports and extends existing theory on social identity and stress. It builds on the study of Escartín et al. (2012) and tests the contextual effect of identification on workplace bullying in a large employee sample across a variety of Spanish organizations.

### Methodology

Respondents were 5065 employees from 217 companies. An established Spanish scale to assess workplace bullying (EAPA-T) and Mael and Ashforth's (1992) measure were used to measure victim status and identification, respectively. Multilevel CFA was used to demonstrate convergent and discriminant validity at both levels of the data structure.

### Results

The study revealed group identification to be an important factor influencing bullying at both the individual and the group level. A context effect was found suggesting that employees in work-groups with strong identification are at lower risk of becoming a bullying victim.

### Limitations

The non-representative sample and the one-nation focus should be noted as threats to external validity.

### Implications

The results suggest that identification measures could be profitably used for organizational diagnosis and to track the success of antibullying interventions.

### Value

These findings add support to the notion that bullying needs to be understood within a broader perspective of workgroup identities.

### **The downside of organizational identification: Relations between identification, workaholism and well-being**

*Lorenzo Avanzi (Trento Univ.)*

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### Purpose

Organizational identification has been found to be positively related to employee well-being, but the empirical evidence is not unequivocal. It has been suggested that identification could have a nonlinear effect on well-being: identification within some “threshold” could have a positive effect, but above it could shift in a negative ones. In this sense some psychological damage could occurs when employees show an over-identification. In particular, we proposed a curvilinear mediational model in which identification curvilinearly predicted workaholism, and workaholism, in turn, negatively affected employee well-being. This curvilinear link between identification and workaholism means that workaholism at first decreases with growing identification, but when identification becomes too strong, workaholism increases, leading in turn to less well-being.

### Design/Methodology

Two studies were conducted using both cross-sectional (195 Italian law court clerks) and longitudinal (140 Italian teachers at T2) samples. To test our hypotheses we computed

two mediational models with nonlinear relations as suggested by Hayes and Preacher (2010).

### Results

Analyses confirmed our hypotheses in both samples.

### Limitations

Our study is limited to Italian employees, so more research is necessary to generalize results to other Countries.

### Research/Practical Implications

From a practitioners perspective, our results show that employers should consider both “sides” of employees attachment. Strongly identified employees may choose to work harder to achieve organizational goals, but this, at certain conditions, could be lead a negative effects on their well-being.

### Originality/Value

This is the first study to empirically confirmed the negative effect of the over-identification on well-being.

## Symposia

### **Spillover and Crossover of Work-Related Experiences**

Session Chairs: *Ana Isabel Sanz-Vergel (Universidad Autónoma de Madrid)* [ana.sanz@uam.es](mailto:ana.sanz@uam.es), *Alfredo Rodríguez-Muñoz (Universidad Complutense de Madrid)* [alfredo.rodriquez@psi.ucm.es](mailto:alfredo.rodriquez@psi.ucm.es)

### State of the art

Several studies have shown that job demands have a negative impact on employees’ well-being, whereas job resources have a positive impact (e.g., Bakker & Demerouti, 2008). However, such studies have only scratched the surface regarding the possible consequences of the work environment for employees’ colleagues, family and friends.

### New perspective/Contribution

The purpose of this symposium is to bring together leading researchers in this area to share their latest research advances on the Spillover-Crossover topic. The first paper in the session by Xanthopoulou and her colleagues present a study on the crossover of performance and work engagement from leaders to their subordinates. In the second contribution, Peeters and her colleagues, using a diary study design, examine the contagion of job crafting between coworkers. In the third contribution, Rodríguez-Muñoz and Bakker examine the extent to which work engagement impact on partner's happiness, as well as if there is daily crossover of happiness between working couples. Shimazu and his colleagues, in the fourth presentation, examine the influence of work engagement and workaholism on their child's emotional and behavioral problems. In the fifth study, Unger and her colleagues investigate the long-term relationship between work time and relationship experiences in dual-career couples. Finally, Sanz-Vergel and Demerouti, using a diary design among dual earner couples, focus on the spillover of emotional labor from work to home, and in turn, how it affects employees' vigor and their partner's marital satisfaction.

### Conclusion and Implications for Research/Practice

This approach sheds light on the complex relationships between work and home domains.

### ***Presentations of the Symposium***

#### **The crossover of task performance and work engagement: A study among leaders and their subordinates**

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*Savvas Papagiannidis (Newcastle Univ.)*

### Purpose

Building on the crossover literature and the job demands-resources model, we examined the direct crossover of task performance from leaders to subordinates, and the mediating mechanisms explaining this crossover. We hypothesized that high levels of performance will cross over directly from leaders to their subordinates. Further, we expected that the crossover of performance will be mediated first, by leaders' work engagement and consequently, by their subordinates' engagement. Also, we hypothesized that subordinates' perceptions of job resources will mediate the transmission of leaders' engagement to their own engagement.

### Design/ Methodology

Online and paper-and-pencil questionnaires were distributed to 7 organizations in Greece. One-hundred thirty-eight employees nested in 40 supervisors participated in the study.

### Results

Results of multilevel analyses supported the positive crossover of task performance. Furthermore, leaders' task performance related positively to leaders' work engagement. Employees working with engaged leaders were also found to be engaged, partly because they reported high levels of job resources. Namely, subordinates' perceptions of job resources mediated the crossover of work engagement. In turn, engaged subordinates were found to perform better. Additional analyses showed that the crossover of engagement was stronger in teams with high (vs. low) performing leaders.

### Limitations

Future studies could replicate these findings by using other-ratings of engagement and performance.

### Practical Implications

These findings imply that leaders play a crucial role in creating engaged and flourishing workforces.

### Originality

To our knowledge, this is the first empirical study that investigates the crossover of performance and work engagement from leaders to their subordinates.

## **A diary study on the contagion of job crafting between coworkers and the relationship with adaptive performance**

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[m.peeters@uu.nl](mailto:m.peeters@uu.nl), *Evangelia Demerouti (Eindhoven Univ. of Technology)*, *Richard E. Arts (Eindhoven Univ. of Technology)*

### Purpose

The purpose of the present study was to prove that day-level job crafting (i.e. seeking challenges, seeking resources and reducing demands) can be transferred between two coworkers within the same unit. A second goal was to study the relationship between day-level job crafting and the degree to which employees adapt to changes within their work unit.

### Design/Methodology

55 employees participated in the study simultaneously with a colleague with whom they worked closely together on a daily basis (55 dyads). Data were collected using a printed booklet consisting of a general questionnaire and a diary survey.

### Results

Results confirmed the contagion of job crafting for the dimension of seeking challenges. Moreover, day-level seeking resources and day-level seeking challenges were positively related to day-level team member adaptivity self-rated. Day-level seeking resources was positively related to day-level team member adaptivity other-rated.

### Limitations

One limitation was that participants chose the coworker of the dyad themselves, which could have been a coworker they liked or had a good relationship with.

### Practical Implications

Stimulating job crafting within organizations is valuable, because it spreads around and helps coworkers' adaptivity to changes.

### Originality/Value

Up to our knowledge the contagion of job crafting has never been studied before. Also, we used a sophisticated design consisting of a diary study with self-rated and other-rated measures of the dependent variables.

## **Engaged at work and happy at home: A diary study among dual earner couples**

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### Purpose

Based on the Spillover-Crossover model, we investigate whether the positive effects of work engagement may go beyond the work setting and beyond the employee. We hypothesized that individuals' work engagement would spill over to the home domain, increasing their happiness level at the end of the day. Moreover, we predicted a crossover of happiness between the members of the couple. We considered that employee's happiness is not only experienced by the employee, but it may also be transmitted to the partner.

### Design/ Methodology

We conducted a diary study among 50 Spanish dual earner couples. Participants filled in a diary booklet during five consecutive working days (N=100 participants and N=500 occasions).



### Results

Results of multilevel analyses showed that daily work engagement had a direct effect on daily happiness. We also found that employees' daily work engagement influenced partner's daily happiness through employees' daily happiness. Finally, results showed a clear bidirectional crossover of daily happiness between both members of the couple.

### Limitations

One limitation is that although we had three levels of analysis in our study (days, members, and dyads) we did not include specific variables at the couple level.

### Practical Implications

Organizations should provide resources to their employees, since these resources may enhance positive experiences at work and at home, creating positive spirals in both domains.

### Originality

To our knowledge, this is the first study that investigates the effect of work engagement on partner's happiness, as well as the bidirectional crossover of happiness between working couples on a daily basis.

## **How work engagement and workaholism are associated with child's emotional and behavioral problems?: A mediating role of happiness**

Akihito Shimazu (*The Univ. of Tokyo*)  
[ashimazu@m.u-tokyo.ac.jp](mailto:ashimazu@m.u-tokyo.ac.jp), Kyoko Shimada (*The Univ. of Tokyo*), Arnold B. Bakker (*Erasmus Univ. Rotterdam*), Evangelia Demerouti (*Eindhoven Univ. of Technology*), Takeo Fujiwara (*National Research Institution for Child Health and Development*), Norito Kawakami (*The Univ. of Tokyo*)

### Purpose

Previous crossover studies have focused mainly on the crossover between employees and their partner. However, crossover may also be found between employees and the other

members of the family such as child(ren). The current study examines how employees' work attitudes are associated with their child's emotional and behavioral problems. We predicted that employee's happiness would mediate the relationship between employees' work engagement and workaholism on the one hand and their children's (reduced) emotional and behavioral problems on the other hand.

### Design/Methodology

A cross-sectional survey was conducted among Japanese dual-earner couples with pre-school child(ren). Valid data from 315 families was analyzed using structural equation modeling.

### Results

For both fathers and mothers, work engagement was positively related to workaholism. In addition, for both genders, work engagement was positively, and workaholism was negatively related to own happiness. Happiness, in turn, was negatively related to the child's emotional and behavioral problems; fathers' work engagement was also directly negatively related to his child's emotional and behavioral problems.

### Limitations

The present study did not test possible reversed causal effects from children's difficulties to their parents' happiness and work attitudes

### Research/Practical implications

To improve work engagement and to decrease workaholism can lead not only to an improvement of employees' own happiness but also to a reduction of their children's emotional and behavioral problems.

### Originality/Value

This research examined the triangle relationship among father, mother, and their child in terms of crossover.

### **Making a virtue out of a necessity: How work time and selection, optimization, and compensation (SOC) associate with relationship experiences in dual-career couples**

*Dana Unger (Univ. of Mannheim)*

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#### **Purpose**

This study investigates the long-term relationship between work time and relationship experiences (i.e., relationship satisfaction, self-disclosure, and relationship withdrawal) in dual-career couples. We propose a positive association between an employee's work time and his/her Selective Optimization with Compensation (SOC), which in turn is hypothesized to relate beneficially to the focal person's relationship experiences. Moreover, we postulate a crossover (i.e., transmission) of the relationship experiences within the couple.

#### **Design/ Methodology**

To test the hypotheses we conducted a two-wave online study with a time lag of 6 months, in which 286 dual-career couples (i.e., 572 individuals, 67.13% working in academia) took part.

#### **Results**

The results supported most of the hypotheses. We found a positive association between the focal person's work time and SOC. Furthermore, SOC positively related to relationship satisfaction and self-disclosure, while there was negative association between SOC and relationship withdrawal. We showed relationship satisfaction and self-disclosure to crossover within the couple. There was no crossover effect for relationship withdrawal.

#### **Limitations**

A methodological limitation is the concurrent measurement of the crossover effect.

#### **Practical Implications**

The results challenge the widespread belief that long work hours have negative consequences for experiences within romantic relationships.

#### **Originality**

To the best of our knowledge, this is the first study to examine relationship consequences of long working hours, which also takes into account crossover-effects of relationship experiences.

### **Emotional labor beyond the work setting: Daily consequences among working couples**

*Ana Isabel Sanz-Vergel (Autonoma Univ. of Madrid)*

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#### **Purpose**

Drawing on the social interaction model and the spillover-crossover literature, we analyzed the effects of emotional labor at work and at home on vigor and marital satisfaction. Specifically, we hypothesized that daily surface acting would spill over to the home domain, which in turn, would reduce employees' daily vigor and their partner's marital satisfaction. Furthermore, we explored the direct crossover of emotional labor at home, vigor, and marital satisfaction between the members of the couple- on a daily basis.

#### **Design/Methodology**

Seventy-five working couples from different professional backgrounds in Spain participated in the study. Both partners filled in daily survey measures over a period of five consecutive working days, twice a day.

#### **Results**

The results of multilevel analyses showed that employees' daily surface acting at work spills over to the home domain, which in turn reduces their own vigor and their partner's mar-



ital satisfaction. Furthermore, daily surface acting at home and daily marital satisfaction cross over between the members of the couple. We did not find support for the crossover of vigor.

#### Limitations

Future studies should include all the components of emotional labor, as well as examine possible mechanisms explaining the crossover effects.

#### Research/Practical Implications

From an organizational viewpoint, training programs on emotional competences should be developed in order to help employees cope with daily emotional demands.

#### Originality/Value

To the best of our knowledge, this is one of the first studies analyzing the daily spillover and crossover of emotional labor.

## Dynamics of Well-being and Emotions at Work

Session Chairs: *Helenides Mendonça (Pontifical Catholic Univ. of Goiás, BR) [helenides@gmail.com](mailto:helenides@gmail.com), Maria Cristina Ferreira (Univ. Salgado de Oliveira) [mcris@centroin.com.br](mailto:mcris@centroin.com.br)*

#### State of the Art

The experiences and positive behaviors such as well-being, feelings, satisfaction, happiness, and work engagement play a leading role in people's needs and motivation. This field of knowledge lacks studies focusing on understanding antecedents and consequences.

#### New Perspective/Contribution

The present symposium focuses particularly on the dynamics that involves well-being and feelings at work, from a micro to a macro analyses perspective, since it encompasses social, organizational, and individual aspects. The symposium is composed of five papers from two countries and four universities. The studies herein presented have a high potential

for practical use in organizations and may influence decision-making process as well as labor relationships.

#### Conclusion and Implications for Research/Practice

In the first presentation, the concept of subjective well-being at work is reviewed and antecedents are investigated at the organizational (practices and values) and individual (coping) levels. After that, Silva, Lopes, and Caetano approach micro-daily events as antecedents of distinct emotions, attitudes, and behavior at work. The study covers events that happened each day for ten days. In the third presentation, the interactions between customers and employees, as well as the influence that emotions have on purchase decision process and the association of daily emotions with health and performance are described. Ferreira discusses the effects of organizational justice and core self-evaluations as positive predictors of work engagement. Finally, Nery, Neiva, and Mendonça evidence that the relationship of planning, preparation, and previous experience with well-being is mediated by all dimensions of perceived fairness.

### Presentations of the Symposium

#### Brazilian Univ. professors' well-being: The role of cultural diversity and coping

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#### Purpose

Studies have suggested that subjective well-being emerges as a result of the prevalence of positive feelings compared with negative feelings, which is especially relevant for emotional adjustment as well as for people's general health. The present study aimed to identify cultural and personal indicators of subjective

well-being in a sample of Brazilian university professors, and also to investigate the mediational role of coping in the relationship between their cultural standards and subjective well-being.

#### Design/Methodology

A cross-sectional study was carried out with university professors in all the five official regions of Brazil. The sample was composed of 514 Brazilian university professors who work in either the public or the private sector. Data were analyzed by hierarchical multiple regression to test the mediation model.

#### Results

The results showed that coping strategies focused on approach and problem solving are mediators in the relationships among cooperation values, initiative practices, and positive feelings at work, favoring flourishing at work and happiness.

#### Limitations

The cross-sectional nature of the study limits the generalization of its results.

#### Research/Practical Implications

Universities should adopt organizational practices based on initiative as well as on cooperation values among employees. These strategies influence well-being at work.

#### Originality/Value

The results of this study may help understand the conditions that promote and inhibit university professors' well-being and may also contribute to build up knowledge on Positive Psychology applied to work organizations.

### **What happens at work, and how does it feel? Micro-daily events at work and emotions**

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#### Purpose

The affective events theory (AET) highlights the importance of work daily events as antecedents of distinct emotions, attitudes and work behavior. This study aims to identify the main micro-daily events at work and associated emotions, and to analyze them within the circumplex model of affect.

#### Design/Methodology

In a first study, participants described organizational micro-daily events that arouse emotional reactions. In a second study, we conducted a diary study through 10 working days. At the end of each day, participants briefly described the main micro-daily events that have happened to them at work. They were also instructed to indicate which emotion they felt and its intensity.

#### Results

Data originated 392 micro-daily events (201 positive and 191 negative). Consistent with AET, positive daily events aroused positive emotions, and negative daily events stimulated negative ones. The most frequent positive events were associated to pleasure, good and contentment. The most salient negative events were related to frustration, upset, angry and displeasure. For instance, *having a good time and laughing* stimulated pleasure (33%). whereas, *having a poor performance on task* triggered frustration (66%).

#### Limitations

We used self-reported measures; to overcome this limitation, the diary study covers events happened on each day during ten days.

#### Research/Practical Implications

This research offers insight into micro-daily events at work and emotional experiences. Plus, it has a strong potential for practical application in organizations as in job-designing, performance management, and training.

### **The impact of customers' behaviors on employees' emotions, performance, and cardiovascular health**

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 \_ Instituto Univ. de Lisboa), António Caetano  
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#### **Purpose**

Research concerning service interactions has focused mainly on customers and how to influence their emotions and buying decisions. However, there is a gap regarding research in the opposite direction, i.e., how customers' behavior and emotions can have a contagious effect on employees.

#### **Design/Methodology**

We conducted a ten working day diary research in a call center. Eighteen participants reported customer related significant events, the emotions aroused, and respective intensity (Low; Medium; High). We measured performance, pulse rate, diastolic and systolic blood pressures twice a day. Participants also reported physical symptoms at the end of each shift.

Results show that participants reported more negative salient events (215) than positive ones (79). The major negative event was 'customer rejects explanations/justifications'. The main positive event was 'friendliness'. All events aroused emotions on employees. Results show that a positivity ratio of daily emotions is associated with health and performance (objective and subjective measures).

#### **Limitations**

Although we used self-report measures, the study covers daily events, which attenuates possible biases.

#### **Research/Practical implications**

Results contribute to deep the knowledge regarding customers' behavior impact on employees' performance and health, and can be useful for managers who wish to improve

employees' emotional lives. It can also help to design training programs to deal with customer behavior.

#### **Originality/Value**

The paper is valuable as it complements and extends knowledge regarding the categorization of customer behaviors and its relation with employee performance and quality of life at work.

### **Organizational justice, core self-evaluation and work engagement: A study with Brazilian employees**

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#### **Purpose**

Work engagement is a positive work-related state of mind characterized by vigor, dedication and absorption. According to the Job Demands-Resources Model, the aspects of the job that are functional in achieving work goals and personal stimulation (job resources) have a positive impact on work engagement, through an intrinsic and extrinsic motivational process. However, it has been shown that personal resources such as positive self-evaluations can also foster work engagement. Therefore, we tested the impact of overall organizational justice (the global perceptions of fairness in organization) and core self-evaluations (a broad personality trait indicated by self-esteem generalized self-efficacy, locus of control and emotional stability) on work engagement. Our hypotheses were that both organizational justice and core self-evaluations would predict work engagement.

#### **Design/Methodology**

The sample was composed of 835 employees from Brazilian organizations pertaining to both public and private sector.

### Results

Hierarchical multiple regression analyses showed both organizational justice and core self-evaluations as positive predictors of work engagement, although organizational justice has a better predictive power. Therefore, our hypotheses were totally supported.

### Limitations

The cross-sectional nature of the study limits the generalization of its results.

### Research/Practical Implications

Organizations should adopt organizational practices based on fair social exchanges as a way toward more employee engagement.

### Originality/Value

Studies guided by JD-R model as a frame for analyzing work engagement have in general tested its assumptions with job resources concerned with job characteristics. To our knowledge this is one of first studies to use organizational justice as a job resource.

## Well-being: The impact of the changing environment and the mediating role of organizational justice

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### Purpose

The aim of this study was to investigate the influence of the organizational change context of organizational change in the perception of organizational justice and wellbeing. The internal context of change was assessed in terms of the existence of planning, preparation and previous experiences to change and the intensity and degree of risk caused by the change process. We proposed a mediation model with organization change context, organizational justice and wellbeing. Well-being was assessed as affection and evaluation of

organizational conditions that influence individual affections.

### Design / Methodology

We performed a cross-sectional quantitative study in a public organization of the energy sector. The sample consisted of 731 employees of a public organization. Participants answered three instruments with agreement scale of 11 points. Data was analyzed by measurement reliability and regression analyzes to test the mediation model.

### Results

The results indicate that the relationship between planning, preparation and previous experience and perception of well-being is mediated by all dimensions of perceived fairness, more emphatic in procedural justice.

### Limitations

This was a cross sectional study which is limited to a single organization.

### Research / Practical Implications

The influence of the degree of risk and intensity of change is not mediated by perceptions of organizational justice, which contradicts the assumptions of the literature. This finding is relevant to the field of study of organizational change.

### Originality / Value

This study advances in the characterization and investigation of the context of change and its impact on the employees of the organization.

## Experimental Industrial Psychology I: Recovery, Sleepiness, and Sleep Quality

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### State of the Art

In times of flexible working hours and compacted workload a more enhanced and effective handling with stress factors attaches rising value to limit the negative consequences for health, security, efficiency and the general quality of live.

### New Perspective/Contribution

To avoid chronic exhaustion and reduced working ability it is necessary to reduce the duration and the intensity of exposure and moreover to increase the duration and intensity of recovery.

### Conclusion and Implications for Research/Practice

This workshop should illustrate sources of exhaustion, accessory symptoms, measurement instruments for recovery sleepiness and as well as immediate countermeasures.

## ***Presentations of the Symposium***

### **Never feeling sleepy again? Sustainable reduction of sleepiness through relaxation in lunch break routines**

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#### Purpose

The aim of the study is to elucidate the immediate and anticipatory sleepiness reducing effects of relaxation during lunch breaks. The second exploratory aim deals with determining the onset and long-term time course of sleepiness changes within a long term worksite implementation..

### Design/Methodology

In order to evaluate the intraday range and long-term development of the proposed relaxation effects, 14 call center agents were assigned to either a daily 20 minutes progressive muscle relaxation (PMR) or a small talk group (ST). Participants' levels of sleepiness were analyzed in a controlled trial for a period of 7 months using anticipatory, post-lunchtime, and afternoon changes of sleepiness as indicated by continuously determined objective reaction time measures (16,464 measurements) and self-reports administered 5 times per day once per month (490 measurements).

#### Results

Results indicate that in comparison to ST, the PMR break induces (a) immediate, intermediate and anticipatory decreases of sleepiness and (b) these significant decreases remarkably show up mostly after one month and even raise for at least another five months.

#### Implications

Although further research is required referring to the responsible mediating variables, our results suggest that relaxation based lunch breaks are both accepted by employees and provide a sustainable impact on sleepiness.

### **Recovery needs and recovery patterns in different types of service jobs**

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#### Purpose

Changing job-demands, and employment patterns, and rising atypical working pattern – especially in the service sector - lead nowadays to both, more obstacles for recovery but also more essential needs to recover from work strain (Krajewski et. al., 2011). This is of particular importance in the growing service

sector with its diverse tasks and job characteristics and often precarious conditions of employment. To obtain more representative information we compare the subjective recovery health and recovery health (RH) status of employees across service jobs.

#### Design/Methodology

We use survey data from the representative recovery study by the Institute for Work Design of North Rhine-Westphalia with 2002 employed and non-employed respondents older than 16 years interviewed by CATI-method from November to December 2011. The subjective health and recovery index is based upon respondent's assessments of their health, quality of sleep and mood. Furthermore, participants were asked about their main work tasks, working conditions and recovery behavior.

#### Results

Descriptive and regression analyses show significant differences between types of service jobs. These effects are partly influenced by certain working conditions, e. g. working hours.

#### Limitations

The survey is cross-sectional and the data on work strain, health, recovery status, sleep and mood are self-reported.

#### Implications

Differentiated knowledge about needs and strategies to recover from service sector work is important for prevention both on the individual and on the organizational level.

#### Originality

To our knowledge, there is no other recent representative survey about attitudes and behaviour concerning recovery, health, obstacles and strategies of employees in Germany.

### **Social stressors at work and sleep quality on Sunday night – The mediating role of psychological detachment**

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#### Purpose

Recovery is a critical link between acute reactions to work-stressors and the development of health-impairments in the long run. Even though recovery is particularly necessary when recovery opportunities during work are insufficient, research on recovery during weekends, is still scarce. To fill this gap we tested, whether the inability to psychologically detach from work mediates the effect of social stressors at work on sleep quality on Sunday night.

#### Design/Methodology

Sixty full-time employees participated in the study. Daily assessment included diaries on psychological detachment and ambulatory actigraphy to assess psychophysiological indicators of sleep quality.

#### Results

Hierarchical regression analyses revealed social stressors at work to be related with psychological detachment and with several sleep quality parameters on Sunday night. Furthermore, psychological detachment from work mediated the effect of social stressors at work on sleep quality.

#### Limitations

Methodological considerations regarding the use of actigraphy data should be taken into account.

#### Research/Practical Implications

Our results show that social stressors at work may lower resources just before people get started into the new working week.



## Originality/Value

This is the first study to show that social stressors at work are an antecedent of psychological detachment on Sunday evening and of objective sleep quality on Sunday.

### Working without respite – Conceptualisation and validation of a recovery competence scale (RCS)

Tom Laufenberg (Univ. Wuppertal, Experimental Industrial Psychology)

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## Purpose

Burnout, exhaustion and permanent tiredness are widespread symptoms of a working society which are due high workload and inefficient recovery. Relevant factors promoting the choice of effective recovery processes are recovery culture, recovery infrastructure, and 'Recovery Competence' (RC).

## Method

RC can be conceptualized outcome based: 'RC = difficulty-of-recovery-task \* recovery-results'. Recovery results itself are determined directly by the duration and intensity of the recovery process. On the other hand RC can be conceptualized determinant based by identifying individual factors which promote effective recovery. These individual factors chosen to measure RC build the subscales of the Recovery Competence Scale (RCS): (a) 'tendency to overexert', (b) 'guarding against strain/ simplification', (c) 'secondary strain profits', (d) 'performance-oriented self-image', (e) 'non-conformism/ creativity/ self-assertion', (f) 'recovery literacy', (g) 'psychological detachment' and (h) 'recovery as value / dysfunctional attitudes'.

## Results

Within an employee sample the RCS was tested via empirical item selection and examined by criteria of good quality e.g. factorial, congruent and external validity. Clear connections between CRS and proven scales of recovery were found: Recovery Experience Questionnaire (Sonnentag & Fritz, 2007), Recovery-Strain-Questionnaire (Erholungs-Belastungs-Fragebogen; Kallus, 1996), Health and Irritation (Mohr, 1998).

## Practical Implication

Measuring RC closes an important gap within general recovery research. Moreover, it helps to identify necessary training demands.

### Work at unusual times – Work at unusual risk?

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## Purpose

To examine the effects of working at biologically and socially unfavorable times (evenings, Saturdays, Sundays) on occupational safety, health, and work-life-balance (WLB).

## Design/Methodology

Secondary data analysis of the 4<sup>th</sup> European Working Conditions Survey (2010, n=23,934 employed workers, representative of the EU workforce) was used to calculate Chi-Square tests and logistic regression models to compare the risk of occupational accidents, reporting at least 1 health impairment(s), and poor WLB between employees with and without work on evenings, Saturdays, and/or Sundays, controlling for several demographic variables, working conditions, and working time characteristics in the regression models.



## Results

An association was found between working evenings/Saturdays/Sundays and impairments to health and WLB before and after controlling for confounding variables. A three-way interaction (evening\*Saturday\*Sunday) was found in the model predicting the accident risk, indicating a more complex relation between unfavorable working times and safety.

## Limitations

Among others, the use of subjective reports may have led to cognitive dissonances, and the cross-sectional design prevents examination of temporal causality.

## Research/Practical Implications

Work at biologically and socially unfavorable times should be kept at a minimum, and – if unavoidable – should be compensated with additional free time instead of financial rewards.

## Originality/Value

This is one of the first studies to examine the effects of work on evenings, Saturdays, and Sundays (separately and in combination) on occupational safety, health, and WLB in a large-scale sample of the EU workforce controlling for confounders, e.g., shiftwork.

# Imagine the Workplace where Listening Becomes Second Nature

Session Chairs: *Dotan Roger Castro* (The Hebrew Univ.) [dotan.castro@mail.huji.ac.il](mailto:dotan.castro@mail.huji.ac.il), *Avraham Natan Kluger* (The Hebrew Univ.) [avik@savion.huji.ac.il](mailto:avik@savion.huji.ac.il)

Listening was argued to have a “miraculous” power of changing the person being listened to (e.g., Rogers & Roethlisberger, 1991/1952). Indeed, active listening is recommended by practitioners for getting desirable results in marketing (Drollinger, Comer, & Warrington, 2006), business (Covey, 1989) and

performance appraisals (Kluger & Nir, 2009) to name a few.

Yet, research of listening is scarce. Therefore, the symposium will deal with three major questions: (a) what are the effects of listening in the work place? A meta-analysis will suggest that listening is highly correlated with perceived leadership, job satisfaction and more. (b) What are the psychological mechanisms underlining listening effects? Both experiments and correlation will suggest that both relational aspects, as liking the speaker, and self-variables such as psychological safety and sense of clarity are responsible for at least some listening effects. (c) If the effects of listening are so positively strong then for whom and when it may be less effective? Again, both experiments and correlations will suggest that individual differences (avoidant-attachment style) and organizational setting (e.g., physical distance) may mitigate the benefits of listening.

## Symposium Contribution

New and diverse theoretical perspectives combined with rigorous research methodologies shed light on a powerful phenomenon that is scarcely researched.

## Practical Implications

Listening is both measureable and trainable. Thus, this collection of papers open new possibilities for improving performance and well-being in future organizations

## ***Presentations of the Symposium***

### **Imagine the future world where supervisors are listening**

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## Purpose

The writings of Carl Rogers appear to suggest that learning to listen could transform the

world. Thus, this review asks what transformations could result from listening and how they are brought about, with a focus on work setting.

#### Design/methodology

Quantitative (meta-analyses where possible) review, and a theoretical review.

#### Results

Listening is highly correlated with variables of interest to work psychology such as perceived leadership ( $k=4$ ;  $N=632$ ;  $r = .73$ , 95% CI .69 - .75;  $Q(3) = 4.52$ ;  $p < .21$ ), subordinate's psychological safety ( $r=.70$ ) job satisfaction (e.g.,  $r=.55$  and  $.66$ ), subordinate's positive affect (.41) and more. Experimental research suggests listening quality impacts the quality of the information shared by speakers ( $k=10$ ,  $N= 528$ , Hedge's  $d = .86$ ; 95% CI .69 - 1.04;  $Q(9)=10.48$ ,  $p < .40$ ). Finally, listening appears to be trainable. Theories suggest that listening affects the speaker partly outside of awareness, alter self-knowledge of the speaker, and even change personality (Rogers).

#### Limitations

The meta-analyses are limited by the scarcity of research on this topic and the poor rigor of many studies in this domain. Theories are mute about possible detrimental effects of listening.

#### Research/Practical Implications

Consistent with theories, listening is a behavior with powerful work consequences, yet rarely attended to by researchers in psychology and organizational behavior. If levels of supervisors listening increase, which seems possible given the evidence regarding trainability, work life could be much more enriching experience and productive.

#### Originality/Value

Providing a bird's eye view on scattered literature and showing relevance to work psychology.

### **"I am listening – please talk to me" – about supportive management and barriers to employee voice**

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#### Purpose

To show (a) that voice may be inhibited by perceived personal risk and by physical distance, even in the face of supportive management; and (b) that the construct of voice should include sharing project related risks and dilemmas.

#### Design/methodology

Two scenario experiments testing effects on voice:

Study 1 ( $N=156$ ) manipulated employee's sense of feeling understood by one's manager (low vs. high) and personal risk (neutral vs. high).

Study 2 ( $N=214$ ) manipulated employee's sense of feeling understood (low, neutral, high) and physical distance (close vs. far).

#### Results

Voice was higher when participants felt understood ( $t(157) = 5.49$ ,  $p < .001$ ,  $d=0.84$ ). A pre-planned contrast showed voice is reduced by high risk in the feeling understood condition ( $t(80)=-2.16$ ,  $p < 0.05$ ,  $d = 0.49$ ).

Voice was higher when participants felt understood ( $F(2, 214) = 2.75$ ,  $p < .07$ ;  $h^2=.026$ ); and when distance was close ( $t(214) = 1.68$ ,  $p < 0.05$ ,  $d = 0.24$ , one-tailed test).

In summary, two studies show that feeling understood determines voice, and that even when one feels understood, perceived risk and distance reduce voice.

#### Limitations

Limited ecological validity and unknown reliability (using a single item for measuring voice).

## Research/Practical Implications

Theoretically, we show that supportive management may not be enough to induce voice. Practically, supportive managers may encourage voice by reducing personal risk for subordinates and consider the challenges of remote supervision.

## Originality/Value

Demonstrating two out of many possible barriers to voice that cannot be overcome by management encouragement.

### **"I hear you!" - The benefits of 'listening' for intra-individual and inter-individual outcomes**

Karina J. Lloyd (Jacobs Univ.)

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## Purpose

To investigate the consequences of listening quality both for the self and for the relationship, as well as the underlying mechanisms that explain these outcomes.

## Design/methodology

A sample of unacquainted students ( $N = 100$ ) talked for 7 minutes to a partner, whilst listeners were assigned to only listen. Participants rated on a 7-point Likert scale perceived listening, affective well-being, sense of clarity, interpersonal trust, and liking of the partner.. Analyses included indirect effect analyses and a path modeling with Mplus6.0.

## Results

In accordance to the hypotheses, listening quality was positively correlated to affective well-being and this was fully mediated by sense of clarity (*point estimate* = 0.30, *CI* = 0.14/0.54;  $R^2_{adj} = 0.33$ ;  $p < 0.001$ ). Listening quality was also positively related to interpersonal trust which in turn was mediated by liking of the partner (*point estimate* = 0.30, *CI* = 0.08/0.41;  $R^2_{adj} = 0.30$ ;  $p < 0.001$ ). Path mod-

eling analysis supports the proposition of two distinctive outcomes of listening quality: one for the self and one for the relationship ( $\chi^2$  (df= 5) = 7.50, SRMR = 0.05, and CFI = 0.98, TLI = 0.96).

## Limitations

Controlled setting may decrease external validity

## Research/Practical Implications

Listening may be a helpful tool to both build and maintain positive relationships between, for example, supervisors and employees or work group members, which in parallel may also produce better sense of clarity and well-being of subordinates.

## Originality/Value

Revealing listening effects and their underlying mechanisms in a controlled setting.

### **The effects of listening on employees psychological safety**

Dotan Roger Castro (The Hebrew Univ.)

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## Purpose

To test Carl Rogers's hypothesis that listening creates Psychological Safety (PS), and to argue that the effect of listening on PS is moderated by attachment style.

## Methodology

Four studies using correlational design (Study 1;  $N=129$ ), laboratory experiments (Studies 2 & 3;  $N= 66$  and  $70$ ), and scenario experiment (Study 4;  $N=253$ ).

## Results

Study 1 showed that perception of one's managers listening and PS are positively correlated ( $r=.65$ ;  $p<.01$ ) and that this link is moderated by avoidant attachment style ( $t=1.7$ ,  $p<.05$ , one tailed). In Study 2 & 3, listening (experimental group) increased speaker's PS com-

pared to control group (free conversation) ( $d = .46$ ;  $p < .05$ ; one-tailed;  $d = .53$ ;  $p < .02$ ). In Study 2 this effect was qualified by a marginally significant interaction with avoidant attachment style ( $F(1,62) = 3.37$ ,  $p < .07$ ) and in Study 3, this moderating effect was significant and appeared to operate at the dyadic level (i.e., mean dyad avoidance moderated the effect of the experimental manipulation). Study 4 showed both a strong listening effect on PS ( $d = 3.76$ ;  $p < .01$ ) and moderation effect of avoidant attachment style ( $F(1,250) = 3.52$ ,  $p < .03$ ; one tailed).

#### Limitations

Our work is mute regarding the type of listening that may benefit most people with avoidant attachment style.

#### Value

Complement the fledgling research on the benefits of supervisor listening (e.g., perceived leadership and reduced stress among subordinates), while showing that existing theories need to be revised to account for the resistance of some people to truly being listened to.

## Work Engagement and Performance: The Linkage Unraveled

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#### State of the Art

Since the concept of work engagement emerged in business contexts, its relation with performance has been a crucial issue from the onset. Indeed, many consultancy firms claim that a linkage exists between employee engagement, and job and business performance. Meanwhile, also scientific evidence accumulates that substantiates that claim. However an important questions remains: How can that linkage be explained? Or what is the role of

work engagement in increasing performance? This symposium seeks to answer this questions.

#### New Perspective/Contribution

The symposium exists of four contributions from four different countries. The first contribution (Besieux et al.) shows that work engagement constitutes the missing link between transformational leadership and the financial performance of business teams of a Belgian bank. The second contribution (Shimazu et al.) shows the differential impact of engagement (positive) and workaholism (negative) on future increases in health, satisfaction and performance in Japanese employees. The third contribution (Reijtsiger et al.) shows among Dutch employees, that readiness (a concept that indicates epistemic motivation) mediates the relationship between increases in engagement (positive) and boredom (negative) on various indices of performance. Finally, among teams of Spanish employees (Rodriguez et al.), the role of collective self-efficacy is elucidated in the team engagement – team-performance nexus.

#### Conclusion and Implications for Research/Practice

Taken together these studies (three of which are longitudinal) suggest: (1) that a work engagement-performance link exists; (2) that this link is positive for engagement and negative for workaholism and boredom; (3) that cognitive beliefs (i.e. readiness and self-efficacy) play a major role in explaining that linkage.

### ***Presentations of the Symposium***

#### **Transformational leadership and financial performance: The mediating role of employee engagement**

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### Purpose

Research addressing the effectiveness of transformational leadership unveils a range of positive outcomes. Studies considering bottom line financial performance outcomes remain however scarce; an issue we aim to address by investigating the relationship between transformational leadership and financial performance at the team level. We moreover hypothesised that the (positive) relationship between transformational leadership and team financial performance is mediated by employee engagement.

### Method

Hypotheses are tested in a sample of Belgian employees working at a bank (N = 6698). Transformational leadership and employee engagement were assessed through self-reports (survey). Financial performance was measured using cross-selling data.

### Results

Regression analyses showed that transformational leadership related positively with both engagement and team financial performance. Engagement related positively with financial performance. Mediation analyses (Preacher & Hayes, 2008) revealed that the positive relation between transformational leadership and financial performance is fully mediated by employee engagement.

### Limitations

Our sample was collected in one organization. Hence, future research could focus on other sectors and countries, thereby extrapolating the generalizability of our findings.

### Implications

Our study links transformational leadership to financial performance at the team level. It also sheds more light on the mechanisms explaining the relationship between transformational leadership and financial performance.

### Originality

This study is, to our knowledge, one of the first to address the mediating role of employee engagement in the relationship between transformational leadership and financial performance. A particular strength is also that team performance was indicated by financial performance measured as cross-selling.

### **Do work engagement and workaholism predict job performance and well-being in opposite directions?: A two-year longitudinal study**

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### Purpose

This study investigated the distinctiveness between work engagement and workaholism by examining their two-year longitudinal relationships with job performance and well-being. Based on a previous cross-sectional study (Shimazu & Schaufeli, 2009) and a shorter-term longitudinal study (Shimazu et al., 2012: measurement interval= 7 months), we predicted that work engagement predicts future superior job performance and well-being (i.e., low ill-health and high life satisfaction), whereas workaholism predicts future poor job performance and unwell-being (i.e., high ill-health and low life satisfaction).

### Method

Two-wave surveys were conducted among Japanese employees in a company, and valid data from 1,196 employees was analyzed using structural equation modeling. T1–T2 changes in job performance, ill-health, and life satisfaction were measured as residual scores that were then included in the structural equation model.

### Results

Work engagement and workaholism were weakly and positively related to each other. In

addition, and as expected, work engagement was related to increases in both job performance and life satisfaction and to a decrease in ill-health. In contrast, and also as expected, workaholism was related to an increase in ill-health and to a decrease in life satisfaction.

#### Implications

Although work engagement and workaholism are weakly positively related they constitute two different concepts. More specifically, work engagement has positive consequences in terms of well-being and performance, whereas workaholism has negative consequences. Hence, the former should be stimulated and the latter should be prevented.

#### Originality

This study examined a long-term prospective relationship of work engagement and workaholism with job performance and well-being.

### **Do engaged workers really make a difference? A longitudinal study of work engagement versus job boredom and their relation with job performance**

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#### Purpose

As boredom is an antipode of engagement, bored employees might perform less well on in-role and extra-role behaviors than engaged employees. However, little is known as to *why* engagement leads to better performance than boredom. The present study therefore examined the influence of engagement and boredom on performance, hereby focusing on the mediating role of 'readiness'. Based on Broaden-and-Build theory and the notion of episodic motivation, readiness is conceptualized as the extent to which individuals are receptive to new relevant information and consequently have the stance to move to action. The move to action refers to three different

dimensions of *process performance* (particular behaviors relevant to organizational goals); extra-role, in-role, and counterproductive behavior.

#### Method

A first study tested a cross-sectional, multiple-group design among employees of a document management company (Sample 1;  $N = 283$ ) and a food processing industrial plant (Sample 2;  $N = 194$ ) using structural equation modeling. The second study was a two-wave survey ( $N = 171$ ) among employees of the document management company.

#### Results

Both studies confirmed the assumption that readiness mediates the relation between work engagement and extra-role behavior. In contrast to our assumptions, both engagement and boredom stimulated in-role behavior directly rather than indirectly. As expected, boredom consistently influenced counter-productivity positively, though not mediated by readiness.

#### Implication and Originality

Taken together, these two innovative studies regarding the incorporation of the multidimensionality of performance indicate that engagement does make a difference, but mainly for extra-role behaviors. Boredom specifically needs to be prevented to avoid counter-productivity.

### **New teams have the power: Building collective efficacy beliefs through engagement and performance over time**

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#### Purpose

Teams are increasingly being used as basic units of work accomplishment, which makes it crucial to develop these from the very begin-



ning when they are newly formed teams. Following Social Cognitive Theory (Bandura, 1997), we propose that collective efficacy beliefs in newly formed teams builds over time by means of past mastery experiences (i.e., in-role performance) and positive emotions (collective engagement).

#### Method

The study adopted a three-wave longitudinal design in which 575 individuals nested within 112 teams participated in three sessions of a decision-making task. To test the hypothesized cross-lagged effects we employed Structural Equation Modelling using the aggregated perceptions of team members.

#### Results

Results showed that collective task engagement predicted collective efficacy ( $\beta = .23, p < .05$ ) and marginally also collective task performance ( $\beta = .20, p = .06$ ) from T1 to T2. Collective task engagement predicted collective efficacy ( $\beta = .23, p < .01$ ) and collective task performance ( $\beta = .32, p < .001$ ) from T2 to T3. Moreover, collective task performance positively influenced collective efficacy, both from T1 to T2 ( $\beta = .20, p < .05$ ) and from T2 to T3 ( $\beta = .43, p < .001$ ).

#### Implications

Support is provided for the SCT, also in the case of teams that are in the very first phase of their development. Practically speaking, suggestions for improving collective efficacy beliefs can be made based on the role of collective engagement (i.e., positive emotions) and past mastery experiences (i.e., in-role performance).

#### Originality

To our knowledge, this is the first empirical study that studies how to build collective efficacy in newly formed teams.

## The Fragmented Working Day: New Angles and Results on Interruptions at Work

Session Chair: *Anja Baethge (Univ. of Leipzig)*

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#### State of the Art

Almost one third of the respondents to the third European Survey on Living and Working conditions indicated that they are interrupted several times a day "in order to take on an unforeseen task" (Paoli & Merllié, 2005). However, the impacts of interruptions are still poorly understood. Experimental studies have revealed cognitive aspects of being interrupted, but effects on workers' wellbeing and performance need further investigation.

#### New Perspectives/Contributions

This symposium brings together new studies on interruptions. The prevalence of interruptions in various occupations and its relationship to emotional exhaustion is addressed in a paper by Stab, Hacker, & Pietzryk. Evidence showing that effects of interruptions vary with "what interrupts what", is presented by Baethge & Rigotti. A paper by Walkowiak, Lang, & Zijlstra argues that interruptions can be seen as a form of unforeseen change to which people can adapt more or less successfully. The fact that people employ different strategies in dealing with interruptions and that this may influence their performance is shown in the final paper, by Leonova & Blinnikova.

#### Research/Practical Implications

The overall aim of the symposium is to contribute to the advancement of research on interruptions and to the development of interventions that reduce their negative impacts. It presents new approaches showing that it is not sufficient to examine general effects of interruption prevalence on well-



being performance. On the contrary, it is important to differentiate between types of interruptions, occupations, and ways in which people cope with them.

### ***Presentations of the Symposium***

#### **Work interruptions in different jobs. The role of regulation requirements**

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##### **Purpose**

Interruptions of work activities are hindrances to their mental regulation. We posit that the degree of additional mental effort that is needed to resume an activity that has been stopped, may depend on the mental regulation requirements of the particular job.

##### **Design/Methodology**

We report on a field study that comprised jobs with different mental regulation requirements, i.e. nursing jobs, administrative jobs, and retail sales jobs (N= 364, 156 and 160, respectively). We investigated differences between the jobs as to the numbers of employees reporting frequent interruptions, the origins of the interruptions, and the degree of emotional exhaustion. We also studied the relationships between interruptions and reported emotional exhaustion.

##### **Results**

Frequent interruptions are reported by more than half of the nurses and employees in the administration, but only by 20 per cent of the interviewed shop assistants. The frequency of interruptions is associated with the degree of emotional exhaustion, but these relationships differ between the job requirements as well. The results can be interpreted in terms of the differences in regulation requirements between the jobs.

##### **Limitations**

The study was cross-sectional and needs to be followed up by longitudinal studies. We recommend using identical tools to examine the effects of the interruptions in different jobs.

##### **Research/Practical Implications**

Further longitudinal studies with identical tools in the three areas are necessary.

##### **Originality/Value**

The main contribution of this study is that it shows that what is experienced as an "interruption" depends on the job content.

#### **Are all interruptions the same? Characteristics of work interruptions and their impacts on well being**

*Anja Baethge (Univ. of Leipzig)*

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##### **Purpose**

Work interruptions are daily stressors that can cause a decrease of workers' well-being. Field studies have focused on the number of interruptions and paid little attention to qualitative aspects, whereas laboratory and simulation studies have shown that task characteristics make a difference. The aim of our study was to examine how various characteristics of interruptions influence the well being of the employees.

##### **Design/Methodology**

Our sample comprised 46 German office workers. They kept a daily diary (on handheld computers) during 5 consecutive working days. We used an experience sampling method to examine the different kinds of work interruptions during the working day, as well as event sampling method to examine self-rated strain in the evening. The data was analyzed using multi-level analysis to test for within and between subject effects over time.

### Results

We found that the various characteristics of interruptions had different effects on the wellbeing of the employees. The findings are partly congruent with findings from laboratory studies. We discuss the results with reference to models of the process of work interruptions proposed in the literature.

### Limitations

It remains to be tested to what extent our results generalize to other occupational groups.

### Research/Practical Implications

The effects of interruptions do not only vary with their number but also with their characteristics. In real working life the effects may differ from those found in laboratory studies.

### Originality/Value

The study is the first to systematically analyse different characteristics of work interruptions in a field setting.

## **The influence of task consistency on adaptation to unforeseen interruptive discrepancies**

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### Purpose

This study investigates people's ability to adapt to unforeseen interruptive discrepancies in complex environments (i.e. adaptability). Interruptive discrepancies are perceived inconsistencies between one's expectations and one's observations of a task, which interrupt automatic processing of task-related information. Researchers have suggested to differentiate between transition adaptation (the immediate relapse in performance after an unforeseen discrepancy) and reacquisition adaptation (the re-learning phase after the

discrepancy) as two types of adaptive reactions. We investigated the influence of task consistency on these types of adaptive performance.

### Design/Methodology

Ninety-four participants were randomly assigned to the consistent or inconsistent condition. They had to perform an air traffic control computer task in which halfway through the experiment an unforeseen change (interruptive discrepancy) was introduced. We used discontinuous growth modeling to differentiate between transition and reacquisition adaptation.

### Results

Results showed that consistency had a negative effect on transition adaptation. There was a smaller relapse of performance in the consistent than in the inconsistent condition. Consistency did not have an effect on reacquisition adaptation.

### Limitations

Future research should investigate the generalizability of our findings in the field.

### Research/Practical Implications

Our study suggests that when people have to perform an inconsistent task, it is more difficult to react to an unforeseen change. This has important implications for job design, especially for jobs that are highly inconsistent.

### Originality/Value

Our study is the first of which we are aware that investigates the influence of task characteristics on adaptation to unforeseen interruptive discrepancies and, more specifically, focuses on transition and reacquisition adaptation.

### **Cognitive strategies of interruption handling. Effects of situational and individual factors**

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#### **Purpose**

The effects of interruptions on the allocation of cognitive resources during the performance of computerized tasks were investigated in laboratory experiments that simulated fragments of typical work.

#### **Design/Methodology**

Following the activity regulation approach (Leontiev, 1982; Leonova, 2010) we made a multilevel assessment of the efficiency and internal costs of task execution in various regimes of interruption handling. The cognitive strategies were investigated with eye-tracking techniques. In addition, we used indicators of (1) vegetative tension, (2) dominant emotional feelings and (3) performance productivity.

#### **Results**

Two different strategies for allocating cognitive resources during the process of interruption handling were distinguished, i.e., “proactive” and “reactive”. They correspond with preparations to the task switching and their mental representation that differ in efficiency. We noted that the choice of cognitive strategy depends on the objective characteristics of interruption events (“simple-complex”, “free – forced responding”), as well as on situational factors that determine the human functional state, and individual features (trait anxiety, emotional stability, etc.). The most sensitive parameters of gaze fixations, cardiovascular reactions and subjective feelings were identified with multiple regression analysis.

#### **Limitations**

The study is experimental in nature. Its findings needed to be verified in field settings.

#### **Research/Practical Implications**

The results may be used to enhance performance via improved user interface design, particularly by offering computerized tools that give meta-cognitive support to choosing an optimal strategy of task switching in case of interruptions.

#### **Originality/Value**

The proposed approach allows making an integrative evaluation of mental costs of ongoing activity and to make interruptions handling more effective.

## **Well-being in Flexible, Mobile and Virtual Work**

Session Chair: Jan Dettmers (Univ. of Hamburg)  
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#### **State of the Art**

The development of new mobile I&C technologies fosters the development of new forms of work which are characterized by high degrees of virtuality, mobility and flexibility (Vartiainen, 2006). These characteristics change the way, the location and the time employees can work and interact but also the demands and resources that may affect the employees' well being.

#### **New Perspective/Contribution**

The proposed symposium examines different aspects of these new forms of work and their effects on well-being. First of all the exposure to and the handling of technologies itself may affect well-being. This aspect is discussed by Salanova and Llorens with the concepts of technostress and technoaddiction. As new technologies allow to work from home new constellations of job resources and recovery opportunities may arise that are examined by Axtell, Daniels, Niven, Hislop and Glover. Furthermore, mobile ICT offer the opportunity to work at every time and any location, which rises formal or informal expectations to be permanently available for work. Dettmers

discusses the effects of specific availability characteristics while Hyrkkänen and Vartiainen presents results regarding physiological effects of mobile work and recovery.

#### Conclusion and Implications for Research/Practice

The research contributions that constitute the symposium study different aspect of flexible, mobile and virtual work using different methodological approaches. The symposium opens new ways of thinking the relationship of technology and well being by focussing on specific characteristics and design of these types of work. This offers concrete implications for the health related design of virtual, mobile and flexible work.

### ***Presentations of the Symposium***

#### **The dark side of technologies: Technostress and technoaddiction among ICT users**

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##### Purpose

The aim is to know the main predictors (demands and lack of resources) of technostress (users report feelings of anxiety, fatigue, scepticism and inefficacy beliefs related to the use of technologies) and technoaddiction (users feel bad due to an excessive and compulsive use of these technologies).

##### Design/Methodology

We sampled 1,072 Information and Communication Technology users. From them, 675 were non-intensive ICT users and 397 used ICT intensively.

##### Results

Multiple Analyses of Variance show significant differences between non-intensive and intensive ICT users (1) in the dimensions of tech-

nostress and (2) in specific job demands and job/personal resources. Moreover, linear multiple regression analyses revealed that technostress is positively predicted by work overload, role ambiguity, emotional overload, mobbing and obstacles hindering ICT use, as well as by lack of autonomy, transformational leadership, social support, ICT use facilitators and mental competences. Work overload, role ambiguity and mobbing, as well as the lack of emotional competences positively predict technoaddiction.

#### Research/Practical Implications

These results have direct implications for Human Resources Management in companies, for samples of both non-intensive and intensive ICT users, since they provide knowledge about the psychosocial risks (job demands and lack of resources) associated to each collective regarding their relationship with the technologies at work.

##### Originality/Value

To our knowledge this study test simultaneously technostress and technoaddiction as well as investigates the antecedents (i.e., main demands and resources) that are associated with both.

#### **Support and recovery amongst home-based virtual workers**

Carolyn Axtell (Univ. of Sheffield) [c.m.axtell@sheffield.ac.uk](mailto:c.m.axtell@sheffield.ac.uk), Kevin Daniels (Univ. of East Anglia), Karen Niven (Univ. of Manchester), Donald Hislop (Univ. of Loughborough), Jane Glover (Univ. of Loughborough)

##### Purpose

This paper extends knowledge on recovery from work by examining the domain specificity of effects, in particular, the impact that virtual (home-based) work has on recovery.

##### Design/Methodology

Two studies were conducted. The first used a quantitative diary methodology in which 'vir-

tual' home-based administrative assistants and traditional office-based assistants completed surveys three times a day, answering questions concerning resources/support, recovery activities, and well-being (N=24, 199 occasions). The second used data from home- and office-based administrative workers in the European Survey of Working Conditions (N=19191).

#### Results

Multi-level analysis of the diary study found that recovery activities were related to job satisfaction. Moreover, support at work during the day was associated with doing more recovery activities in the evening. Critically, this relationship was stronger for virtual assistants than for office-based assistants. This finding was replicated in the European Survey data.

#### Limitations

The diary sample size is small and the European Survey data is cross-sectional.

#### Research/Practical Implications

The impact of support might be specific to the domain in which it is given. This enables home-based virtual workers to use support to recover at home after work, whereas for office-based workers, the impact of support remains at the office and is less likely to affect recovery activities at home.

#### Originality/Value

Adds to our understanding of recovery and well-being in virtual work. The robustness of the conclusions is enhanced by the use of two methods, one involving a method with high internal validity and the other involving a large multi-national sample.

### **Extended availability for work by ICT – Design of availability requirements and effects on well-being and recovery**

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#### Purpose

Permanent and extended availability for work has become a common work requirement for many employees as a consequence of the everytime-everywhere accessibility that is realized by ICT. The aim of the study is to analyze how extended availability for work during non-work time affects well-being, work engagement and recovery. Furthermore, the study analyzes specific design criteria of availability that moderate these effects.

#### Design/Methodology

246 employees completed an online-questionnaire assessing characteristics of extended availability for work during non-work time and indicators of well-being. 105 indicated their agreement to participate in a second survey.

#### Results

Hierarchical Regression analysis revealed that availability requirements in non-work time were negatively related to recovery experiences and positively related to strain indicators and work-family-conflict but also to work engagement. Control on availability had additional effects on strain (negative) and on work engagement (positive). A variety of availability characteristics buffers slightly the negative effects of extended availability for work.

#### Limitations

The survey data is cross-sectional and self-report. A second wave to analyze longitudinal data is in progress.

#### Research/Practical Implications

The potential negative effects of extended availability on recovery and well-being may be buffered by a variety of design characteristics. Identifying the specific characteristics of extended availability may contribute to a good design of new forms of work that are based on ICT.

### Originality/Value

Extended availability for work in non-work time that has been identified as a main stressor in modern forms of work is broken down into specific characteristics that may buffer or increase detrimental effects of this work requirement.

### Heart rate variability measurement in assessing stress and recovery reactions in mobile work

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#### Purpose

The research on mobile virtual work argues that there are new workload factors related to this kind of work. One main thing to be considered in this “anytime and anywhere” work is the adequate recovery. Heart rate variability (HRV) reflects the functioning of the autonomic nervous system (ANS). Thus, stress and recovery of the ANS can be evaluated with HRV. New applications allow also measurements in the field. In this study, the usability of HRV was tested in assessing the stress and recovery of mobile employees during their business trips.

#### Methods

The heart rate of ten globally mobile employees was measured by a HRV recording procedure. They carried a recording system for three business trip days and entered all their actions into a measurement diary. After the analysis, the stress and recovery chart was shown to the testee and his experiences were discussed.

#### Results

During business trips, the sympathetic activation was dominant and parasympathetic activation phases remained relatively short. The Root Square of Successive Difference also demonstrated low recovery. Diary kept during

the HRV measurement period showed that mobile working days were long.

#### Research implications

HRV serves as a tool for visualizing the stress and recovery reactions of the body and thus a method for reflective work load related discussions.

### New Trends in Research on Workplace Bullying: Latest Results from Longitudinal Studies

*Session Chairs: Guy Notelaers (Radoud Univ. Nijmegen, NL / Monstarecon, BE)*

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#### State of the Art

Current insights in the domain of workplace bullying stem from primarily cross-sectional designs that are not capable to separate causes from consequences. Since bullying is often been conceived as a process, the use of prospective studies and cross-lagged models with continuous measures is welcomed. However, they may pose a challenge with respect to concept of workplace bullying itself. The latent class Markov model aligns with the latter by presenting discrete stages but is hampered by the limited number of causal processes that can be investigated. Hence, a possible trade-off seems to emerge: investigating the causes and consequences of exposure to workplace bullying or of workplace bullying.

#### New Perspective/Contribution

The six papers included in this symposium are focused on examining bullying at work using longitudinal designs in various samples from various countries. Contributions investigate the process of workplace bullying, as well as the dynamic relationships between targets and actors (perpetrators). In addition we present studies that re-examine theoretical avenues to explain workplace bullying like destruc-



tive leadership, demand resources and insecurity. Finally, behavioral outcomes like turnover were also re-examined.

#### Conclusion and Implications for Research/Practice

Wittgenstein once said 'Whereof one cannot speak, thereof one must be silent. To underline the language games we are caught in. The stalemate between exposure bullying and bullying may present important challenges for both research and practice as they may represent two somewhat different discourses. Taken together, these studies demonstrate the importance of how bullying is conceptualized and measured.

### ***Presentations of the Symposium***

#### **Does psychological well-being mediate the association between experiences of acts of offensive behaviour and turnover among care workers? A longitudinal analysis**

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#### Purpose

The purpose of the study was to investigate whether psychological well-being of care workers in the Danish eldercare services mediated the association between experiences of acts of offensive behaviour and actual turnover.

#### Methodology

A prospective cohort questionnaire study was conducted among employees in the eldercare services in Denmark. Employees aged 55 or more and non-care staff were excluded from the study. Employees who were working in

eldercare at baseline (2005) and no longer worked in eldercare at follow-up (2006) were interviewed with questionnaires. Respondents were coded as cases of turnover (N=608) and were compared to employees who had not changed jobs during follow-up (N=4,330).

#### Results

Frequent and occasional experiences of bullying and threats and occasional experiences of unwanted sexual attention at baseline entailed significantly increased risk of turnover at follow-up. Exposure to physical violence did not. Further analyses showed that psychological well-being significantly reduced the risk of turnover, and that well-being partially mediated the association between bullying and turnover and fully mediated the association between threats, unwanted sexual attention and turnover.

#### Limitations

We didn't control whether the termination of employment relationships was voluntary or involuntary.

#### Practical implications

Prevention of threats, unwanted sexual attention, and – especially – bullying may contribute towards improving well-being and reducing turnover among eldercare staff.

#### Originality

Research suggests that experiences of acts of offensive behaviour are associated with risk of especially intended turnover. This study contributes with longitudinal knowledge of associations between experiences of different types of offensive behaviours and risk of actual turnover.



### **Associations between Job Insecurity and Workplace Bullying in a context of crisis: A longitudinal test**

*Elfi Baillien (Human Relations Research Group, HUBrussel / WOPP, KU Leuven)*

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#### **Purpose**

Studies have revealed cross-sectional associations between job insecurity and being a perpetrator of bullying. The current study aims to further knowledge by testing various causal models (normal causation, reversed causation and reciprocal causation) that link job insecurity to being a perpetrator of bullying over time. To enhance the impact of the work environment (as compared to individual characteristics) in view of job insecurity, we specifically focus on a financial organization that was dealing with the economic crisis at the time of our study. Following stress theory, we hypothesised normal causation in which job insecurity at T1 related positively with being a perpetrator of bullying at T2.

#### **Methodology**

Hypotheses were tested in a complete panel two-wave sample of Flemish employees (six months time lag). The competing models were tested and compared using SEM (Amos 20).

#### **Results**

The analyses revealed that the reversed model fitted our data best. In this model, being a perpetrator of bullying T1 associated negatively with job insecurity T2.

#### **Limitations**

This study was conducted in one organization. Future studies could benefit from a replication in a more heterogeneous dataset that includes a range of organizations.

#### **Implications**

Our results challenge the idea of job insecurity as a stressor that encourages bullying over time. During the presentation, various empirical and theoretical explanations for this finding are discussed.

#### **Originality**

To our knowledge, this study is the first to explore the longitudinal relationships between job insecurity and being a perpetrator of bullying; particularly in the context of the economic crisis.

### **Adopting a person-environment perspective for the understanding of workplace bullying: A longitudinal investigation**

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#### **Purpose**

Previous research on the development of bullying suggests that working conditions such as role stressors, high job demand and low control may promote the phenomenon via the stress process. Research has also shown, however, that personal vulnerability may be involved. By using a longitudinal design, the present study adopts a person-environment perspective and explores the hypothesis that distressing working conditions are related to bullying particularly for personally vulnerable employees.

#### **Methodology**

A follow up study with a one-year time lag has been conducted on employees (N=234; 86.3% females) of the health sector. Distressing working conditions were operationalized in terms of high job demands and low job control, while personal vulnerability in terms of mental distress.

### Results

Job demand positively affected the experience of bullying behaviour longitudinally, while neither job control nor job strain played an effect. Mental distress was not longitudinally related to the experience of bullying behaviour. However, mental distress strengthened the effect of job demand on bullying such that at higher mental distress the impact of job demand on bullying was stronger.

### Limitations

The main limitation of this study is the difficulty in generalizing its results due to the small sample available.

### Implications

The obtained results suggest that the prevention of bullying should focus on both distressing working conditions and distressed employees, in other words primary and secondary prevention should be adopted.

### Originality

The original features of the study are its longitudinal nature and the integration of work environmental and personal factors in the understanding of bullying.

## **Supervisor leadership style as predictors of workplace bullying: a six-month follow-up study**

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### Purpose

The present study aimed to prospectively examine the effects of supervisor leadership style on workplace bullying in a six-month follow-up study in Japan.

### Design/Methodology

A total of 991 respondents returned their questionnaire including NAQ-R, MLQ, and demographic and occupational characteristics

(gender, age, education, marital status, chronic condition, occupation, employment contract, shift work at baseline and life events in the previous six months at follow-up). Among them, 404 participants (40.0%) completed a follow-up questionnaire in March 2012. After eliminating respondents with missing values, we analyzed data from 329 respondents. Victims of workplace bullying were defined as 33 or greater scores of NAQ-R. Multiple logistic regression analyses of workplace bullying at follow-up were conducted on MLQ scales among the whole respondents, as well as a subsample ( $n=273$ ) who did not experience bullying at baseline.

### Results

After adjusting for demographic and occupational characteristics and workplace bullying at baseline, high scores of passive and high laissez-faire leadership styles were associated with 3.8-6.3 times higher the risk of workplace bullying at follow-up. Among respondents who did not experience workplace bullying at baseline, these were associated with 5.5-8.0 times higher risk of workplace bullying at follow-up.

### Limitations

Response and follow-up rate were low so that it might overestimate the risk of bullying.

### Practical Implications

These results suggest that passive and laissez-faire leadership increase workplace bullying. Training supervisor in their leadership style may decrease workplace bullying.

### Originality/Value

To our knowledge, the study is the first to explore the association between leadership and bullying using longitudinal design.

### Examining reciprocal relationships between target and perpetrator in workplace bullying situations: A two-wave longitudinal study

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#### Purpose

The aim of this study was to explore longitudinal relationships between organizational factors (workload and procedural justice) and targets and perpetrators of workplace bullying. We compared several causal models (baseline or stability, normal, reversed and reciprocal models).

#### Design/ Methodology

The sample comprised 286 employees from two companies in Madrid, and we used a time-lag of one year.

#### Results

Results of structural equation modeling analyses showed that reciprocal model fit the data the best. We found that T1 workload was related positively to T2 target of bullying, and T1 procedural justice was related negatively to T2 target of bullying. There was a significant reverse effect of T1 target of bullying on T2 workload. Furthermore, we found a reciprocal relationship between being the target and the perpetrator of bullying.

#### Limitations

Social desirability may have reduced the likelihood of obtaining accurate responses in view of particularly perpetrators' reports of bullying. Our findings may therefore bear on a subgroup of perpetrators who are willing to admit their situation.

#### Research/Practical Implications

Overall, these findings emphasize the need to extend the traditional causal models of workplace bullying to more dynamic approaches.

#### Originality

To our knowledge, this is one the first longitudinal studies that investigates the reciprocal relationship between targets and perpetrators of workplace bullying.

### Workplace bullying, a process?

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#### Purpose

Bullying is often described as an escalating process. However popular this view is, empirical support for it is still lacking. We aim to empirically explore the process of workplace bullying.

#### Design/ Methodology

The analysis draws on a 3 wave Norwegian representative study about workplace bullying (n=1100), using both the Negative Acts Questionnaire (NAQ-R) and a self-labeling item to measure workplace bullying. Latent class Markov models were deployed to estimate the number of stages in the development of workplace bullying.

#### Results

Five different stages are identified that match the theoretical conception of workplace bullying as a process. The transition probabilities yielded: the lower the exposure at baseline the higher the probability to not become more bullied. The transition probabilities suggests a gradually de- and escalatory process because transitioning to adjacent latent stages was more probable than transitioning to other stages.

### Limitations

Attrition analysis shows that a large proportion of the victims at T did not take part at T+1. This is in line with the expulsion stage but may have led to an underestimation of the severity of the victims stage.

### Research/Practical Implications

These findings support cross-sectional studies hinting towards a process and show that workplace bullying is not an either-or process, nor a continuum.

### Originality

This is the first study that investigates the process of workplace bullying.

## Personal Goals in the Work Context

Session Chairs: *Bettina S. Wiese (RWTH Aachen Univ.) [wiese@psych.rwth-aachen.de](mailto:wiese@psych.rwth-aachen.de), Katariina Salmela-Aro (Helsinki Collegium for Advanced Studies) [katariina.salmela-aro@helsinki.fi](mailto:katariina.salmela-aro@helsinki.fi)*

### State of the Art

In I&O-psychology the role of motivational processes has long been acknowledged. This holds particularly true with respect to assigned goals and MBO-activities. More recently, personal work goals have started to also receive attention, and a number of studies demonstrated that, for instance, goal importance and attainability are associated with employees' well-being. Most research, however, is restricted to cross-sectional designs and neglects the broader life context in which these goals are embedded.

### New Perspective/Contribution

This symposium brings together research from three European countries (Finland, Germany, Switzerland) that considers different facets of goals and goal-related self-management to develop an integrative perspective on their effects on work adjustment and well-being. The authors focus on career-related goal set-

ting and pursuit in different life phases (e.g., high-school students, middle-aged adults), and they differentiate between different levels of analysis by taking into consideration both characteristics and contents of career goals and the interplay with goals from other domains.

### Conclusion and Implications for Research/Practice

Cross-sectional, longitudinal, diary and training results show that workplace characteristics, social support from the work and non-work domains as well as specific contents of goals play a role for whether personal goal pursuit leads to well-being and to an increase in work adaptation and long-term success expectations. The symposium informs practitioners how individuals can be trained to develop better goal-related skills, and it suggests ideas for how work contexts might be altered to better serve the person-specific motivational aspirations of different employees.

## Presentations of the Symposium

### Career goal-related success expectations during transition from school to work: A person-oriented approach

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### Purpose

The purpose of this longitudinal study was to examine the change and trajectories of career goal-related success expectations during transition from school to work life.

### Design/Methodology

Altogether 850 young Finns reported their career goal-related success expectations first in the last year of comprehensive school and four times during the following seven years.

### Results

The results showed that overall there was significant increase in career-goal related success expectations. However, there was considerable heterogeneity in the development. Growth Mixture Modeling showed that four trajectories of career goal related success expectations fitted the data best: high-increasing (78 %), low-increasing (9 %), decreasing (6 %) and a U-shaped trajectory (7 %). The participants in the high-increasing trajectory were likely to be males, have high SES background, have high career goal importance and have high levels of career goal-related support. Those in the trajectory of decreasing success expectations were the least adapted in terms of their career situation later on.

### Limitations

Future research may assess the changes in the context of career goals during the transition. In addition, besides the individual factors also the contextual factors needs to be taken seriously.

### Research/Practical Implications

Successful work entry is crucial for the career development.

### Originality/Value

Longitudinal research using person-oriented approach is still in minority in the context of work motivation. We provided evidence of different pathways to work entry, their antecedents and consequences.

### In search of a suitable career: The role of personal goals

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### Purpose

The choice of a suitable profession is a big challenge for young people. Knowing that the

decision in favor of one career has an impact on the entire life makes this choice important but difficult. This decision making process is influenced by three factors: being insufficiently informed about alternatives, valuation problems, and uncertainty about the outcomes (Germeijs & De Boeck, 2003). How can young people deal with this uncertainty and make a career decision? One answer may be the concept of personal goals. Personal goals are mental representations of a desirable future and they give structure and meaning to the everyday life (Brunstein & Maier, 1996). People invest a considerable amount of time and energy to achieve their goals, map out strategies on how to implement their goals, and monitor the progress they made (Brunstein, 2000). Thus personal goals provide the basis of self-directed action. Therefore, we assume that goal characteristics (e.g., self-efficacy, goal conflict) have a significant effect on indicators of career planning (e.g., career indecision).

### Design/Methodology

We tested our hypothesis in a quasi-experimental field study using a sample of 164 German high school students ( $N=75$  received a goal intervention). Data was collected at three times over a period of two months.

### Results

Path analyses supported our hypotheses.

### Limitations

It remains to be tested whether these effects are short-lived or persist over time.

### Research/Practical Implications

Our results imply that goal interventions are an effective tool for career counseling.

### **Selection, optimization and compensation in goal pursuit in the life domains of work, family, and leisure**

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(RWTH Aachen Univ.), Alexandra M. Freund (Univ. of Zurich)

#### **Purpose**

This study focuses on the interplay of personal goals between and within the life domains of work, family, and leisure. It investigates the effect of the self-regulatory strategies Selection, Optimization, and Compensation (SOC) on positive and negative goal relations in everyday life. We test the hypothesis that SOC-behavior is associated with less goal conflict and more goal facilitation between and within life-domains.

#### **Design/Methodology**

We are currently conducting a time-sampling study with an intended sample size of  $N = 100$  employed adults aged between 30 and 55 years and living with family or partner. The participants answer questionnaires on smartphones seven times a day for 20 days. Momentary conflict and facilitation between personal goals, SOC-strategies, and well-being are assessed in a self-report format.

#### **Results**

Data collection is still ongoing. We will conduct multilevel analyses with inter- and intra-domain goal conflict and goal facilitation as dependent variables and the different SOC-strategies as independent variables.

#### **Limitations**

The study relies exclusively on self report and does not include behavioral measures of performance.

#### **Value**

The measurement burst approach allows to track inter- and intrapersonal variability on different psychological constructs in everyday life of the participants. The current study

takes leisure into account and thus goes beyond most studies on “work-life” balance. This allows a more comprehensive understanding of the complex interplay of goal pursuits in multiple life domains.

### **Personal work goals in conflict: A risk to occupational well-being?**

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#### **Purpose**

The research investigated the moderating role of goal conflict in the relationship between the contents of personal work goals and burnout. Eight goal categories (organization, competence, well-being, career-ending, progression, prestige, job change, employment contract) were used to describe managers' goals. Goal conflict reflected the degree to which a goal was perceived to interfere with other areas of life.

#### **Design/Methodology**

The data included 806 Finnish managers who responded to a survey in 2009. The participants were on average 46 years old and 69% of them were men. The data was analysed with the General Linear Modelling (GLM).

#### **Results**

Participants whose goals related to well-being, career-ending, or job change reported low goal conflict and high burnout. Interestingly, when goal conflict was high, job change goals were related to low burnout. Participants whose goals related to organization, competence, or progression had on average low burnout. These participants also reported the highest goal conflict with other areas of life. Moreover, in a high goal conflict situation, these goals were related to high burnout.



### Limitations

Study focused on the most important personal work goal among managers. Further research of multiple goals would be needed with other employee groups.

### Research/Practical Implications

Goal conflict can be a potential risk factor to lower occupational well-being among participants focused on organizational, competence, or progression goals at work.

### Originality/Value

For the first time, both goal processes (goal content and related conflict) has been considered when investigating occupational well-being of employees.

## How decision latitude moderates the effects of performance goals on well-being and functioning at work

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### Purpose

This study examined how decision latitude moderates the effects of performance achievement goals on two types of outcomes: indicators of effective functioning at work (i.e., self-rated work adjustment, coworker-rated work adjustment, and coworker-rated learning competence) and subjective well-being (i.e., affective well-being and life satisfaction). The two classes of performance goals, prove and avoidance, differ with regard to basic underlying motives. Accordingly, we hypothesized that decision latitude differentially influences the consequences associated with the two classes of performance goals.

### Design/Methodology

We studied 247 employees in a longitudinal design with three measurement occasions using a hierarchical linear model.

### Results

Decision latitude improved work adjustment and learning as well as affective well-being and life satisfaction for those who adopted performance-prove goals. When performance-avoidance goals were coupled with high decision latitude, this had both desirable (i.e., augmented well-being) and undesirable effects (i.e., impaired functioning).

### Limitations

Future research may assess contextual factors in ways that do not involve subjective perceptions of these factors.

### Research/Practical Implications

Supervisors frequently decide how much autonomy they grant to their direct reports. Therein, they may consider that individuals are affected by autonomy differently.

### Originality/Value

Research on factors in the work environment that influence motivation processes is still scarce. We provided evidence that decision latitude is a workplace characteristic that moderates the consequences of the avoidance and prove dimensions of performance goals.

## Effects of Recovery from Work and Factors that Hinder or Promote Unwinding Processes

Session Chairs: Jessica de Bloom (Univ. of Tampere, FI) [j.debloom@gmail.com](mailto:j.debloom@gmail.com), Taru Feldt (Univ. of Jyväskylä, FI) [taru.feldt@jyu.fi](mailto:taru.feldt@jyu.fi), Mark Cropley (Univ. of Surrey, UK) [mark.cropley@surrey.ac.uk](mailto:mark.cropley@surrey.ac.uk)

### State of the Art

Working in a demanding environment is associated with adverse consequences for well-being. Job stressors are related to elevated levels of blood pressure, heart rate and stress hormones causing physical illnesses in the long run (e.g., Hjortskov, et al., 2004; Ferrie, et al., 2008). Moreover, psychological diseases like burnout caused by high workload and



other aversive working conditions have long been on the rise (Maslach, Schaufeli & Leiter, 2001). Recovery, defined as a period of rest and psycho-physiological unwinding in which employees are relieved from demands that are otherwise acting upon them, can be considered an antithesis to work stress and plays a crucial role in protecting employee' health, well-being and long-term workability (Geurts & Sonnentag, 2006). However, work-related recovery research is a relative young sub discipline. Recovery processes, outcomes and factors that foster or hamper rapid and complete unwinding are not yet well understood.

#### New Perspective/Contribution

This symposium has a two-fold emphasis and aims to provide new insights into recovery by 1) focusing on the effects of different types of recovery and 2) shedding light on factors that are associated with beneficial or detrimental recovery outcomes (i.e., effort-reward imbalance, overcommitment, rumination).

#### Conclusion and Implications for Research/Practice

By using a broad spectrum of research methods (i.e., longitudinal research designs, diary studies, experiments, intervention studies) and by applying a multisource approach (i.e., effects of romantic partners' and supervisors' behaviors and experiences on individual recovery outcomes), our symposium will add to our growing understanding of recovery and its underlying processes.

### ***Presentations of the Symposium***

#### **The impact of expressive writing on work-related affective rumination: A randomized controlled trial**

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#### Purpose

Being unable to unwind and mentally 'switch-off' from work — called work-related rumination — has been associated with a range of negative symptoms including fatigue, sleep disturbance, and increased cardiovascular disease risk. This paper presents the results from an intervention study that examined the effects of writing about issues and problems at work, called 'expressive writing' on ruminative thoughts about work and other well-being measures.

#### Design/Methodology

White collar ( $n = 48$ ) workers reporting high scores on the affective subscale of the Work-Related Rumination Scale were randomised to an expressive writing or control condition. In the expressive writing condition, individuals wrote about their most troubling thoughts and feelings about a stressful work situation that continues to bother them. While control participants wrote a factual description of their day, both groups wrote for 20 minutes a day for three consecutive days. Participants were then assessed at one and three months.

#### Results

At three months, participants in the expressive writing condition reported significantly lower work-related rumination and lower anxiety, negative affect and sleep problems, relative to the controls.

#### Limitations

It is not known how long the effects of the intervention lasted, as it was not possible to conduct a longer-term follow-up.

#### Research/Practical Implications

The results suggest that expressive writing may be a valid and cost-effective, intervention for reducing work-related rumination, and improving the health of white-collar workers.

**Originality/value**

To our knowledge, this is the first study that has utilized an expressive writing intervention within a sample of people who find it difficult to mentally disengage from work.

**Giving a good example: Supervisor's effect on employees' recovery from work**

Anna Koch (Univ. of Münster, DE)

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**Purpose**

In this multisource study, we examined how supervisors affect their employees' recovery from work. Relying on behavioral learning theory, we hypothesize that supervisors can constitute positive role-models concerning their employees' recovery. Well-recovered supervisors who balance work and private life successfully should increase their employees' recovery from work.

**Design/Methodology**

To test our hypotheses we collected data from 82 supervisors and their 254 employees working in diverse German companies. As predictor variables we assessed supervisors' role-modeling behavior with respect to work-life-balance, relaxation and emotional exhaustion. As outcome variables we assessed employees' relaxation, positive work reflection, emotional exhaustion and boundary strength at home.

**Results**

Our analyses showed that supervisors' role-modeling behavior increased employees' relaxation, positive work reflection and boundary strength at home. Also, supervisors' relaxation decreased employees' emotional exhaustion. Supervisors' emotional exhaustion increased employees' emotional exhaustion and decreased employees' boundary strength at home.

**Limitations**

We cannot ultimately draw conclusions about causality from our multisource design.

**Research/Practical Implications**

Supervisors' behavior with respect to work-life-balance is important for employees' recovery and constitutes a starting point concerning health interventions. In future research underlying mediating mechanisms should be examined.

**Originality/Value**

Until now, research on organizational predictors of recovery is scarce. Our study addresses this research gap and shows how supervisors can increase their employees' recovery from work. We show that supervisors can kill two birds with one stone: by balancing their work and private life adequately they can benefit not only their own well-being but also their employees' recovery.

**Recovery and creativity: Do vacations encourage innovative thinking?**

Jessica de Bloom (Univ. of Tampere, FI)

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**Purpose**

Prolonged recovery periods, as opposed to stressful work periods, may form the breeding ground for positive emotions. According to Broaden- and Build Theory, these emotions may lead to increases in creativity. Our research question was: How do vacations affect creativity? Relations with mental detachment from work and positive affect were also investigated.

**Design/Methodology**

In a longitudinal field study in 58 workers, we assessed self-reported work-related creativity, mental detachment and positive affect before, during and after long summer vacations (>14

days). Guilford's Alternative Uses Task was applied to measure general creativity before and after vacation.

#### Results

Work-related creativity and fluency of ideas (i.e. the sheer number of generated ideas) were similar before and after vacation. Cognitive flexibility (i.e. the diversity of ideas) increased after vacation ( $d=0.33$ ). This increase was more pronounced in females and vacationers who felt less psychologically detached.

#### Limitations

The small sample size and the characteristics of the participants may limit our findings to western, highly educated workers with liberal vacation rights.

#### Research/Practical Implications

Besides providing excellent opportunities to recover from work demands, vacations positively influence cognitive flexibility. This may also translate into increased work performance. Contrary to expectations, psychological detachment during vacation seemed to hamper rather than to promote innovative thinking after vacation.

#### Originality/Value

To our knowledge, the relation between vacations and creativity has never been studied before. Our findings concerning this association suggest that extended recovery periods do not only compensate work strain (passive mechanism) but may also provide a basis for personal growth (active mechanism).

### **Long-term patterns of effort-reward imbalance and over-commitment: Investigating occupational well-being and recovery experiences as outcomes**

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*Jyväskylä, FI), Sabine Sonnentag (Univ. of Mannheim, DE)*

#### Purpose

The aims of this study were to identify long-term patterns of effort-reward imbalance (ERI) and over-commitment (OVC) and examine how occupational well-being and recovery experiences differ in these patterns.

#### Design/Methodology

The study was based on four-year follow-up data with three measurement points collected from Finnish managers ( $N = 298$ ).

#### Results

Latent Profile Analysis resulted in five long-term ERI-OVC patterns: a high risk (20 %; high ERI, high OVC), low risk (24 %; low ERI, low OVC), relatively low risk pattern (47%; low ERI, moderate OVC), favorable change (7%; decreasing ERI and OVC), and unfavorable change pattern (2%; increasing ERI). Managers in the high risk pattern showed higher burnout and poorer recovery compared to those in the low risk patterns. No differences were found in work engagement between the high and low risk patterns.

#### Limitations

The study focused on managers, which is why it does not allow for direct generalizations of the results to other occupational groups.

#### Research/Practical Implications

The results suggest that long-term exposure to high ERI and OVC should be prevented when burnout and recovery are used as criterion, whereas for work engagement this combination does not seem to be detrimental. It seems that high OVC counterbalances the negative effects of high ERI on work engagement and helps to maintain engagement.

#### Originality/Value

The study showed that there was heterogeneity in managers' ERI and OVC and that the patterns differed from each other both in size

and in the level of and direction of changes in ERI and OVC.

### **The role of partners for employees' daily recovery**

*Verena Hahn (Univ. of Muenster, DE)*

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#### **Purpose**

Although employees' recovery processes typically take place in their private social environment (e.g., their family), little is known about the role of partners for employees' recovery processes. This study investigates the role of partners' psychological detachment from work for employees' psychological detachment and well-being.

#### **Design/Methodology**

In this multisource diary study, 50 dual-earner couples completed daily surveys via handheld devices over the course of one week. Participants reported their psychological detachment during off-job time and their momentary well-being (positive and negative affect, relationship satisfaction) before going to bed. We used multilevel structural equation modeling and the actor-partner interdependence model to examine within- and between-couple effects at the same time.

#### **Results**

Regarding effects within couples, we found employees' and their partners' daily fluctuations of psychological detachment to be positively associated. Partners' daily fluctuations of psychological detachment were negatively associated with employees' negative affect only when there were no children in the household. With regard to between-couple effects, partners' psychological detachment was associated with reduced negative affect and increased relationship satisfaction.

#### **Limitations**

As we did not assess couples' specific interaction behaviors, we cannot explain the mechanisms of how partners' lack of psychological detachment affects employees' well-being.

#### **Practical Implications**

Employees should be aware that their psychological detachment affects their partners' psychological detachment and negative affect, particularly when they do not have children.

#### **Originality**

We contribute to recovery research by focusing on the understudied role of partners for employees' recovery processes. We advance research by focusing on both effects within and between couples.

## **Antecedents and Consequences of Proactive Behavior**

*Session Chair: Sandra Ohly (Univ. of Kassel)*

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#### **State of the Art**

Current research on proactive behavior in organization has started to discuss the commonalities and differences in proactive behaviors, e.g. voice behavior, implementation of novel ideas, and proactive work behaviors. Furthermore, multiple antecedents such as motivation, leadership and work design have been studied extensively, and some consequences of proactive behaviors have been explored.

#### **New Perspective/Contribution**

This symposium brings together researcher from three European countries to discuss further commonalities and differences in the proactive behavior, and their antecedents and outcomes. Leadership (Madrid et al., Belschak & Den Hartog) and stressors (Starzyk et al., Fay) are studied as antecedents, and strain as outcome of proactive behavior (Wihler & Blickle). Finally, an HRM perspective offers a

novel approach on how to enhance proactive behavior in organizations (Ohly et al.).

#### Conclusion and Implications for Research/Practice

Multiple pathways will be discussed on how to enhance proactive behavior in organizations. Furthermore, our understanding of the concept of proactive behavior will be enhanced by discussing similarities and differences between the six studies.

### ***Presentations of the Symposium***

#### **Do transformational leaders influence all the stages of innovation? Evidence for the discrete impact of charisma on generation, promotion and implementation behavior**

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##### Purpose

Transformational leadership (TFL) has been supported as a relevant antecedent of general ratings of innovative behavior; yet, the extent to which TFL impacts on discrete innovative behaviors (i.e. generating, promoting and implementing novel ideas) still remains ambiguous. The generation of ideas represents an intrapersonal process that is mostly sensitive to individual antecedents. Promoting novel ideas mainly depends on trust in others at work, while implementing novel ideas is highly reliant on contextual factors (e.g. autonomy and support). So, TFL is proposed as relevant to implementing novel ideas but less important to generating and promoting them (H1), because, through charisma, TFL is primarily oriented to the *active adoption of changes*. Furthermore, follower's high-activated positive affect is proposed as a mediator in the above relationship, such that TFL

triggers feelings of enthusiasm, inspiration and activation, which in turn foster change-oriented endeavors (H2).

##### Design/Methodology

A diary study (91 employees, 10 waves of data, 892 observations in total) and multilevel structural equation modeling were used to test the hypotheses.

##### Results

TFL was positively related to idea implementation, but not to idea generation and promotion. Furthermore, high-activated positive affect fully mediated the TFL-idea implementation relationship.

##### Limitations

This study used repeated measured method and multilevel mediation analysis; however, affect and behavior were measured at the same time. So, further research using a full-longitudinal design is needed.

##### Research/Practical Implications

Some behaviors in the process of innovation can be enhanced by TFL.

##### Originality/Value

This study indicates that TFL's influence on idea implementation transpires through followers' positive/activated states.

### **Leaders as role models of proactive behavior**

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##### Purpose

While knowledge on the personal and situational antecedents of proactive behavior has increased rapidly, our understanding of how people acquire proactive behavior is far more limited. Here we investigate whether leaders act as role models for their followers in show-

ing proactive behavior at work. Theories on transformational and ethical leadership, for instance, suggest that role modeling is an important part of leadership. In addition to testing whether leaders' personal example directly promotes followers' proactive behavior we also investigate the role of followers' expectations (outcome and self-efficacy expectations) and hypothesize that these expectations act as moderators of the relationship between leader and follower proactivity.

#### Design/Methodology

To test our hypotheses, we conducted two multi-source (survey) field studies among employees working in different companies and industries.

#### Results

Linear regression analyses were computed to test the hypothesized relationships. Results of both studies show that leader proactivity is significantly related to follower proactivity. Followers' self-efficacy acted as a moderator of the relationship between leader and follower proactive behavior. Followers' outcome expectations did not play a significant role in their adoption of proactive behavior.

#### Limitations

Experimental or longitudinal research could strengthen conclusions.

#### Research/Practical Implications

The findings show that vicarious learning of proactive behavior may not work for all followers equally well.

#### Originality/Value

Few research has investigated how employees learn which type of behavior (e.g., proactive or reactive behavior) it is appropriate to show, and (almost) no studies have focused on whether and how employees acquire proactive behaviors (e.g., training, role modeling).

### **The Relationship between stressors and voice in meetings as a function of voice content – An experience-sampling study**

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#### Purpose

We examined between-person as well as within-person relationships of different job stressors with three specific types of voice behavior. More specifically, we analyzed a) whether stressors experienced in general can explain between-person differences in meeting-specific voice behavior and b) whether specific stressors experienced during a workday are differentially associated with distinct types of voice during a meeting on the same day.

#### Design/Methodology

Data were collected during five consecutive workdays among 83 employees reporting on 180 meetings. Additionally, general levels of perceived stressors and voice behavior were assessed prior to the start of the daily surveys.

#### Results

Results from CFAs indicate that solution-focused, problem-focused, and divergent-opinion voice indeed capture three different aspects of voice behavior in meetings. Multi-level regression analyses revealed differential between-person and within-person relationships of job stressors and meeting-specific voice behavior.

#### Limitations

Main limitations are a relatively small sample-size on Level 2 and 40% of participants reporting only on one meeting.

#### Research/Practical Implications

It is important to understand which particular stressors promote or inhibit specific voice behaviors. Studying voice behavior in meetings is of great relevance because specific



voice behaviors can influence the course and outcomes of meetings.

#### Originality/Value

To our knowledge, this is the first experience-sampling study looking on meeting-specific voice behavior. It is also the first study showing differential relationships between stressors and three types of voice (as proposed by Lebel et al., 2011).

### **Stressors and proactive behavior: The role of regulatory focus for the daily stressor - Personal initiative link**

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#### Purpose

There is an increasing interest in stress research to better understand the factors that “make for a good day”, thus, to explore daily fluctuations in work stressors and their effects on work outcomes. Effects of daily stressors on proactive work behaviors such as personal initiative have been fairly mixed. We suggest that trait Regulatory Focus (RF; Higgins, 1997), in particular prevention focus, can account for this. Individuals with a high *prevention focus* are concerned with fulfilling duties and obligations (prevention-ought); they seek to avoid failure and insecurity (prevention-avoidance). Individuals with a *low* level of prevention focus should be ready to take the risks involved in initiative taking such that low levels of prevention focus should result in a positive stressor – personal initiative link.

#### Design/Methodology

Thirty-two pharmacists carried handheld computers for up to eight working days (k=235). They filled in surveys several times a day to assess daily stressors, RF, and personal initiative. We also obtained trait measures of RF.

#### Results

Data was analyzed with HLM. Prevention-ought RF did not moderate the stressor – personal initiative link but prevention-avoidance RF did: For individuals with a *low* prevention-avoidance RF the level of daily stressors (e.g., time pressure, role conflict, role overload) was positively associated with daily personal initiative. This was not the case for individuals with high prevention-avoidance RF.

#### Limitations

The level-2 sample size is low.

#### Research/Practical Implications

This research highlights the role of individual differences in stress outcomes.

#### Originality/Value

Regulatory focus needs to be considered in stress research.

### **When being proactive is bad for you – the neutralizing role of political skill**

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#### Purpose

Recent research has shown that engaging in initiative behavior at work can lead to a higher perception of role overload and job stress because extra-role-behavior goes beyond of what is expected of one at work. On the other hand political skill has been demonstrated to have beneficial effects in stress reactions. Therefore the purpose was to examine the neutralizing effects of political skill on relationships between the extra-role behavior personal initiative and role overload or job stress, respectively.

#### Design/Methodology

We tested these hypotheses with a sample of 133 employees and their supervisors of different occupations. Supervisors rated employee's personal initiative and political skill, whereas



employees rated role overload and job stress. Hierarchical regression analyses were employed.

#### Results

Political skill interacted with personal initiative to predict role overload but not job stress. High political skill minimizes significantly increases in role overload with increasing personal initiative whereas low political skill does not.

#### Limitations

The cross-sectional design does not allow inferences and the heterogeneous sample may be covering combined effects of personal initiative and political skill on job stress.

#### Research/Practical Implications

The study highlights the relevance of political skill in the extra-role behavior-strain relationship. Findings should be replicated with samples of single occupations to exclude interferences. For practice employees development and training of political skill should be facilitated and monitored.

#### Originality/Value

Being the first study to examine effects of political skill as neutralizer in the personal initiative-strain relationship this study contributes more insights in the personal initiative as well as strain literature.

### **What do proactive students of economics and business administration value about their future jobs?**

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#### Purpose

Previous research focussed on the antecedents of proactive behavior of working individuals in organizations, indicating that over time, proactivity are linked to challenging jobs. However, it is unclear if individuals craft their job to become more challenging or self-select into challenging jobs. Furthermore, little is known about the recruitment and selection of proactive individuals. This study examines the work values of proactive individuals to examine the potential self-selection process.

#### Design/Methodology

A total of 970 business students of universities of six German universities indicated what they valued in their prospective job (reputation of the job or employer, challenging tasks, income, work-life balance, self-determination of work and job security), and rated their dispositional proactivity. 49.4 % of participants were female and 89.5 % of all respondents were under 25 years.

#### Results

Hierarchical regression analyses controlling for school-leaving grades and other potential relevant demographic variables revealed that proactive individuals have higher expectations compared to less proactive individuals, and that they value those work values that stimulate their proactivity (self-determination and challenging tasks) more than those which are unrelated to proactivity.

#### Limitations

The cross-sectional design prohibits causal inferences, and the sample of students limits the generalizability of results.

#### Research/Practical Implications

The results indicate that self-selection is likely to account for previous findings, and that potential employers need to provide jobs that stimulate proactivity in order to be able to recruit proactive individuals.

**Originality/Value**

This study goes beyond previous studies by examining proactivity from an HRM perspective.

## **Experimental Industrial Psychology V: Advances in Biosignal Analysis and Machine Learning**

Session Chairs: *Martin Golz (FH Schmalkalden, Univ. of Applied Sciences) [m.golz@fh-sm.de](mailto:m.golz@fh-sm.de), Tom Laufenberg (Univ. of Wuppertal) [t.laufenberg@uni-wuppertal.de](mailto:t.laufenberg@uni-wuppertal.de)*

**State of the Art**

Signal processing is a dynamic interdisciplinary research field containing the area of systems engineering, electrical engineering and applied mathematics that deals with operations on or analysis of signals, or measurements of time-varying or spatially varying physical quantities. Possible signals of interest can include e.g. video, audio, acceleration, thermal data, body movements.

**New Perspectives/Contributions**

We would like to show advances in signal processing algorithms in order to demonstrate the power and broad application of these approaches. We give a review on present and newly developed approaches to the research field of biosignal analysis and machine learning, highlighting their application potential for research and daily life settings.

**Research/Practical Implications**

Signal Processing is the basis of effective development of technology based laboratory and ambulatory measurement systems. These systems mainly consist of video, audio, and biosignal based sensor approaches, which were enabled by improvement of storage capacity processor speed, and sensor robustness. Moreover, these approaches might be able to build a paradigm shift in psychological

research due to their potential of collecting longitudinal, field data from many subjects in a high temporal resolution grasping even short term processes and rarely happened events.

### ***Presentations of the Symposium***

#### **Evolutionary simulations to determine the human circadian period using an extended two process model**

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**Purpose**

In fatigue risk management, one main technological aspect is the development of vigilance expert systems to simulate the human sleep-wake behavior. Such models can predict chronotype-specific health and fatigue risks caused by shift work and thus aid the design of improved work schedules.

**Design/Methodology**

The Two-Process-Model (2PM) accomplishes the sleep/wake times as a function of preceding sleep/wake episodes and the human circadian rhythm. The phase-shifting and entraining effects of light onto the circadian rhythm, in turn, can be modeled with a Phase and Amplitude Response Curve (PRC/ARC). We propose the Extended Two-Process-Model (E2PM) by coupling the PRC/ARC to the 2PM. Evolutionary optimization was used to adapt model parameters to a population of representative chronotypes, drawn from a large empirical survey.

**Results**

A population of chronotypes shows the following behaviour under the constraints of

forward (morning-evening-night) and backward (night-evening-morning) rotating schedules: a) forward-rotating schedules are less fatiguing for the majority of chronotypes, and b) early chronotypes and long-sleepers have more difficulties to adapt to both schedule scenarios.

#### Limitations

The E2PM is currently not designed to predict work performance and does not distinguish between task-specific impacts on fatigue for different work requirements, e. g. air traffic control vs. commercial driving.

#### Research/Practical Implications

If combined with sensor recordings to assess real light exposure, this model can provide accurate, long-term sleep-wake predictions under changing light and time constraints.

#### Originality/Value

Establishing feedback loops between sleep-wake behavior and circadian responsiveness towards light in combination with evolutionary adaptation to achieve individual entrainment is so far unrepresented.

### **Cardiovascular measures and psychophysiological variables during an ultra-short sleep-wake protocol**

*Cdristian Heinze (Univ. of Applied Sciences, Schmalkalden) [c.heinze@fh-sm.de](mailto:c.heinze@fh-sm.de), Udo Trutschel (Circadian Technologies Inc., Boston, MA, US), Jarek Krajewski (Univ. Wuppertal), Martin Golz (Univ. of Applied Sciences, Schmalkalden)*

#### Purpose

In order to achieve consistent simulations of human sleep-wake cycles, the influence of circadian rhythmicity and sleep propensity on long-term cardiovascular oscillations were investigated.

#### Design/Methodology

Volunteers followed a protocol of alternations between 10 minutes of attempted sleep and 20 minutes of forced wakefulness over 50 hours in isolation. EEG, ECG, blood pressure and body temperature were recorded continuously. During waking, volunteers rated their subjective sleepiness. Beat-to-beat intervals (BBI) were derived from ECG and blood pressure. Time/frequency domain and complexity measures were calculated for each BBI series, as well as coupling strengths between them. Spectral delta power and sleep stage classifications were estimated from EEG during attempted sleep.

#### Results

The amount of non-REM sleep and delta power during sleep displays a maximum around 2 am and two minima during daytime. Additionally, non-REM sleep is significantly more present during night hours of the 2<sup>nd</sup> half of the protocol, while REM sleep almost vanishes. BBI features like heart rate, short-term variability, or low and high spectral power follow the rhythm of body temperature. Other BBI features are sensitive to sleep onset and follow the rhythm of non-REM sleep amount.

#### Limitations

This investigation was focussed on episodes of attempted sleep; results might not be applicable to wakefulness.

#### Research/Practical Implications

Specific cardiovascular measures may be suitable to “gauge” the circadian-dependent component of an individual's sleep-wake-structure.

#### Originality/Value

The experimental utilization of ultrashort sleep-wake cycles is capable of unmasking and assessing circadian effects in biological functions within a relative short period of two days.

**WALNUT- a biopsychophysics toolbox**

Sven Hoffmann (*Leibniz Research Centre for Working Environment and Human Factor*)

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The methodological demands with respect to biosignal-processing in ergonomics and other work related research areas increase permanently. For example, multivariate statistics are increasingly applied in the decomposition of electroencephalographic (EEG) data. More important is that the amount of acquired signals/variables increases in the applied context, such as driving simulation studies, where researchers become interested in the joint analysis of psychological and physiological data. For this purpose efficient and economic analysis tools are essential.

Though there exist already some software packages dealing with either psychophysics, statistics or EEG analysis, these packages lack mainly of two points: they are solely suitable to one kind of analysis and/or they are commercial and thus contradict the idea of research being independent of commercial interests. However, in recent years the Python programming language caught increasingly attention in research because of its highly object oriented capabilities, easy to learn syntax, and numerical capabilities. Furthermore, it is Open Source, and thus can be used by everyone. The license even allows the usage in the commercial context, as long as Python itself is not commercially distributed. Our aim is thus to provide a free Open Source Software (WALNUT), which is designed to read and analyze not only time series data such as EEG data, but also is able to analyze behavioral data such as response times fittings. Since the software is Open Source the source code is open to everyone and every programmer who

is willing and interested might contribute to its improvement and active development.

**Improving the pupillographic sleepiness test utilizing computational intelligence**

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**Purpose**

After adaptation to darkness and during sleepiness prominent fluctuations of pupil diameter appear with amplitudes of several millimeters. The pupillographic sleepiness test (PST) has been developed in order to measure these fluctuations. The pupil unrest index (PUI) is a time domain feature obtained to estimate sleepiness. We compare PUI based measure to adaptive biosignal processing of the pupil diameter time series.

**Design/Methodology**

10 volunteers participated in this study and executed in the morning 3 test runs in alert state with TSS < 5 h (time since sleep) and in the late night 3 test runs in sleepy state with TSS > 17 h.

**Results**

PST standard analysis with PUI > 6.6 led to mean classification accuracies 74%. Improvements were achieved with adaptive biosignal processing. Power spectral densities (PSD) of the pupil diameter time series have been estimated using weighted overlapped segment averaging. Empirical optimization of parameters utilizing computational intelligence yielded mean accuracies of 92.5%.

**Limitations**

It is open if results remain valid for larger number of subjects.

**Research/Practical Implications**

Modern and comprehensive signal processing techniques have the potential for drastic improvements with respect to standard techniques.

**Originality/Value**

With error rates of less than 10% the PST has the potential to provide a break-through in the area of fit-for-duty testing.

### **Integrating different approaches in cross-cultural research by identifying cultural value profiles**

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**Purpose**

Within cross cultural research, the perspectives on culture differ according to the underlying conceptualization of the construct. While some authors apply a holistic approach of analyzing culture, others suggest taking an analytic research perspective into account. In order to integrate both perspectives and to capture the complex interplay of cultural variables in cross-cultural research, an understanding of culture as a configural or profile construct seems fruitful (Tsui & Nifadkar, 2007). However, in cross cultural organizational behavior research little attention has been given to the configural nature of culture. Accordingly, the purpose of this research is to present both holistic and analytic perspectives on culture and to discuss their implications for cross cultural organizational research.

**Design/Methodology/Results**

Different options of identifying patterns or profiles of cultural value dimensions are presented and conceptually compared.

**Limitations**

As a restricted number of cases on country level is a common problem within cross-cultural research, the choice of methods and the interpretation of results should be done with careful deliberation.

**Research/Practical Implications**

This study enables researcher and practitioners to integrate different perspectives on culture and to apply the idea of culture as a configural construct in their cross-cultural research.

**Originality/Value**

Taken together, this study broadens the understanding of cross-cultural organizational research by providing an overview and a conceptual classification of different research methods for value profile recognition.

## **Resources in an Occupational Context and their Relations to Measures of Subjective Well-being**

*Session Chair: Michaela Knecht (Univ. of Zurich)*

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**State of the Art**

Adverse work conditions have been the focus of previous research, with emphasis placed on how factors such as work stress can be detrimental to an individual's health and well-being. Moreover, a high workload can interfere with the life domains of family and leisure.

**New Perspective/Contribution**

This symposium has an alternate focus and rather considers the potential resources individuals utilize at work and the advantageous effects of work. Work is considered as a resource rather than as a threat to family and leisure life. Predictors of work satisfaction

and the perception of one's work as calling, as well as resources and buffers against work stress are explored.

Three of the four presentations are associated with the Individual Project 7 of the National Centers of Competence in Research (NCCR) LIVES and financed by the Swiss National Science Foundation.

#### Conclusion and Implications for Research/Practice

Orientations to happiness were positive predictors of work satisfaction. Work stress was negatively related to a general belief in a just world and occupational self-efficacy. On a cross-sectional basis, we found that more positive relations between work and the other life domains were associated with higher life satisfaction. An intervention study indicated that the use of strengths at work fostered the perception of one's work as a calling.

Thus, the presentations of this symposium highlight that it is worthwhile to put more emphasis on resources at the workplace instead of focusing solely on the detrimental effects of unfavorable work conditions.

### ***Presentations of the Symposium***

#### **The experience of work stress: An investigation of personal resources and buffers**

*Claire Johnston (Univ. of Lausanne)*

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##### **Purpose**

This research explores the role of resources in work stress, simultaneously investigating general (just world beliefs- BJW) and context-specific (occupational self-efficacy) factors. Believing in a just world helps to cope with various life difficulties (e.g., Sutton & Douglas, 2005). Yet, the ways in which BJW may help to

cope with work stress is still unknown. We explored the potential effects of general and personal BJW (Dalbert, 1999; Lerner, 1965) in the prediction of general work stress (de Buin & Taylor, 2005). Further, we examined the role of occupational self-efficacy comprised of employees' confidence to manage workplace tasks (Schyns & von Collani, 2002).

##### **Design/Methodology**

Our representative sample (N =1894, 49.2% male) consisted of Swiss working adults ( $M_{age}=42$ ). Participants responded to online or paper-pencil self-report questionnaires of study variables.

##### **Results**

Hierarchical multiple regression showed that general BJW reduced work stress; personal BJW had no effect. Occupational self-efficacy had a direct effect on stress but also acted as a buffer, lowering stress levels under conditions of high job demands.

##### **Limitations**

Given the cross-sectional nature of the study, no comment on causation is possible.

##### **Research/Practical Implications**

This study extends the positive contribution of BJW beyond that of only personal BJW. It highlights the adaptive capacity of general BJW. Also, domain specific self-efficacy can act as a buffer, particularly in the management of situational job demands.

##### **Originality/Value**

Just world beliefs are related to lower stress levels independent of context, whereas the protective function of occupational self-efficacy appears to be more context based.

#### **Orientations to happiness at the workplace: Can they predict measures of work satisfaction?**



Symen Brouwers (Univ. of Zurich)

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#### Purpose

Positive psychology mainly focuses on what makes people happy. One central construct within positive psychology are the orientations to happiness. Three orientations are distinguished: life of pleasure (hedonism), life of engagement (flow), and life of meaning (eudaimonia). A life of pleasure (or hedonism) is described as the principle of “maximizing pleasure and minimizing pain”. Persons with a pronounced orientation towards a life of engagement seek challenging activities that are accompanied by feeling absent and being completely absorbed. A life of meaning is defined as a life that is lived in accordance with one’s virtues, as has already been postulated by Aristotle. All three paths to happiness have been shown to be robust predictors of subjective well-being.

#### Design/Methodology

Based on a sample of over 1,800 Swiss employed adults, we investigated if (and which) orientations to happiness are best able to predict indicators of work satisfaction.

#### Results/Practical Implications

Similar to life satisfaction, work satisfaction was also most consistently related to a life of engagement. When additionally controlling for further predictors (age, gender, personality), a life of engagement remained a stable predictor of several work satisfaction variables, whereas the predictive impact of both other orientations was lower. These findings imply that orientations to happiness are positively associated with work satisfaction.

#### Limitations

Further research, based on longitudinal data, is needed to clarify if the orientations do really cause work satisfaction.

#### Originality/Value

To our knowledge, this is one of the first studies addressing the role of the orientations to happiness in the work context.

### Work as resource for family and leisure

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#### Purpose

There is some evidence suggesting that leisure activities help to increase productivity at work or to feel more relaxed in the family context (Fritz & Sonnentag, 2006). In this study, we turn the relations between the domains of work, leisure, and family around and test the hypothesis that work is a resource for the satisfaction in the domains of family and leisure. We consider three facets of work as a resource, namely (1) transfer of positive mood from work to family and leisure, (2) transfer of competences, and (3) compensation (cf., Wiese, Seiger, Schmid, & Freund, 2010). The aims are: (1) To describe the degree, to which work serves as a resource for family and leisure, (2) to investigate the temporal stability over six months, (3) to analyze the association of the degree to which work serves a resource with general and domain-specific life-satisfaction over time.

#### Design/Methodology

A two-wave, six-month longitudinal online study with an intended sample of  $N=300$  employed adults aged between 30 and 55 years and living with their family or partner.

#### Results

Data collection is still ongoing with t2 starting in September 2012. We will use structural equation modeling to test the hypothesis that work constitutes a resource for satisfaction in the family and leisure domain. Cross-sectional and longitudinal analyses will be reported.



## Limitations

Self-report data

## Originality/Value

Longitudinal study including the relations of work with both family and leisure in order to allow a more comprehensive understanding of the complex interactions between multiple life domains.

### Your strengths are calling: Preliminary results of a strengths-based intervention at work to increase calling

Claudia Harzer (Univ. of Zurich)

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## Purpose and Originality/Value

Cross-sectional data indicated that the application of at least four of the seven highest character strengths seemed to be crucial for seeing a job as a calling (Harzer & Ruch, 2012). The present study aimed at testing the assumed causality empirically for the first time.

## Design/Methodology

A sample of 101 employed volunteers (51 males, age:  $M = 42.70$ ,  $SD = 10.38$ , 19-70 years) participated in a random-assignment, placebo-controlled web-based intervention study. The intervention group ( $n = 50$ ) was instructed to use the individually four highest strengths more often at work for four weeks. The control group did a modified "You at your best"-task (cf., Seligman, Steen, Park, & Peterson, 2005) for four weeks thinking about situations in four different contexts where they excelled. Participant completed the Values in Action Inventory of Strengths (Peterson, Park, & Seligman, 2005) and the Calling Scale (Dobrow & Tosti-Kharas, 2011) before the training (pretest), directly after the training (posttest 1) as well as three (posttest 2) and six months (posttest 3) later.

## Results

Data analyses showed a significant increase for calling in the intervention group but not in the control group from pretest to posttest 1. Moreover, this higher level of calling in the intervention group remained in posttest 2 and 3.

## Limitations and Research/Practical Implications

Overall, the data underline the assumed causality that the application of strengths at work leads to seeing a job as a calling. Limitations regarding research design as well as research and practical implications will be discussed.

## Current Approaches to Job Demands

Session Chairs: Christian Korunka (Univ. of Vienna)

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## State of the Art

There is general agreement that work has changed considerably since the introduction and dissemination of information and communication technologies in the 1980s, and that political and economic transformation altered the context of today's industrial relations (Cascio, 1995). These ongoing changes may have negative, but also positive effects on the employees. As a result of these general trends, there is an ongoing debate that there is a need for new perspectives on job demands.

## New Perspective/Contribution

The symposium combines researchers from five European countries studying new approaches to job demands. *New job demands arising from accelerated change* are a consequence from social acceleration processes (Korunka et al.), leading to negative and positive work-related outcomes (Kubicek et al.). The importance of work intensification is also shown by a study on *job demands among*

*Swedish public sector employees* (Sverke et al.). The potential effects of *work-time related stressors* were found to be mediated by personal needs of the employees (Tanner et al.). Another 'new' stressor is *technostress*. Its negative effects may be alleviated by a transformational leadership style (Venture et al.). *Illegitimate tasks* could be another consequence of increased time pressure, showing its unique contribution to strain in a number of empirical studies (Jacobshagen et al.).

#### Conclusion and Implications for Research/Practice

Rapid changes are observable in the working world. Researchers are challenged to describe, analyze, and empirically confirm potentially new job demands. Some of the studies show that both, negative and positive work related outcomes of new job demands may be expected.

### ***Presentations of the Symposium***

#### **Job demands arising from accelerated change: Functional mechanisms and potential outcomes**

Christian Korunka (Univ. of Vienna) [christian.korunka@univie.ac.at](mailto:christian.korunka@univie.ac.at), Bettina Kubicek (Univ. of Vienna)

##### State of the art

There is general agreement that work has changed considerably with the introduction and dissemination of ICTs in the 1980s (Green, 2004). Moreover, political and economic transformation altered the context of today's industrial relations. Such 'accelerated social changes' (Rosa, 2005) are expressed in perpetually changes in work practices, tasks, and expectations. The validity of knowledge decreases (Obschonka et al., 2012). New job demands arising from accelerated changes are a consequence of these changes.

#### New perspectives/Contributions

The goal of this presentation is the description of demands arising from acceleration related changes, and the delineation of their functional mechanisms. *Work intensification* is the most obvious demand resulting from the acceleration of the speed of work. *Intensified job related autonomy* results from deregulation processes at work, whereas *intensified career related autonomy* derives from increasing uncertainties in the world of work. Social acceleration processes also lead to intensified learning, resulting in the *actualization of skills* and the *actualization of knowledge*. Depending on individual appraisal processes, these demands may have the potential for both, positive outcomes (job satisfaction, empowerment) and negative outcomes (irritation, emotional exhaustion). The need for additional self control and subsequent energy depletion (e.g., Baumeister et al., 1998) may be responsible for negative outcomes, whereas motivational self regulation processes (Deci & Ryan, 2000) may result in positive job-related outcomes.

#### Research/Practical Implications/ Originality/Value

First empirical studies confirmed the proposed effects of new job demands arising from accelerated change. Longitudinal studies are needed because of the inherent time-related characteristics of these demands.

#### **The ambivalent consequences of work intensification**

Bettina Kubicek (Univ. of Vienna) [bettna.kubicek@univie.ac.at](mailto:bettna.kubicek@univie.ac.at), Matea Paškvan (Univ. of Vienna), Christian Korunka (Univ. of Vienna)

##### Purpose

There is cumulative evidence that work intensity has increased over the past years. Consequently, work intensification has been recognized as a "new" job demand which causes strain and emotional exhaustion (Kubicek et

al., 2012). Yet, qualitative research findings suggest that work intensification not only impairs well-being but also boosts subjective performance (Aubert, 2009). Mastering an intensified workload may be perceived as competence and may therefore confirm an employee's self-worth (Gebner et al., 2010), contributing to subjective performance. To shed light on the ambivalent consequences of work intensification, we assessed whether work intensification is indeed positively related to subjective performance and emotional exhaustion and whether these relations are mediated by competence and strain, respectively.

#### Design/Methodology

We tested our hypotheses in a sample of 599 service employees using hierarchical regression analyses.

#### Results

Work intensification was positively associated with subjective performance ( $b=.11$ ,  $p<.01$ ). Entering competence in the regression equation significantly reduced this relation ( $b=.07$ ,  $p<.05$ ). Beyond that, the positive relation between work intensification and emotional exhaustion ( $b=.41$ ,  $p<.001$ ) was significantly reduced ( $b=.21$ ,  $p<.001$ ) when strain was included as a mediator.

#### Limitations

In addition to replicating our finding in other work contexts, future research should identify resources which alleviate the negative effects of work intensification.

#### Research/Practical Implications

Our results imply that job redesign should aim at reducing intensified workload. Moreover, stress management trainings should heighten the awareness for the competence affirmation effect *and* the energy depletion effect of work intensification.

#### Originality/Value

This study investigates the mechanisms underlying the ambivalent consequences of work intensification.

### **I don't have the time to do my job: Job demands and resources among Swedish public sector employees**

Magnus Sverke (Stockholm Univ.)

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#### Purpose

Working life is characterized by work intensification. This trend is evident also in the public sector where budget cuts result in an increased work load, reduced predictability about the future, work–life interference, and lack of opportunities for recovery. Many employees have to perform their work in conflict to their professional values, have insufficient resources to fulfill their tasks, and perceive a lack of managerial support. The aim of this paper is to investigate the relative importance of such job demands and resources for employee work attitudes, behavior, and well-being.

#### Design/Methodology

The data are being collected within an intervention project aimed at reducing job demands and increasing job resources. An online baseline questionnaire is currently being administered to all employees of a public sector welfare unit in Sweden.

#### Results

Time 1 results investigating the relative importance of various job demands and resources will be presented.

#### Limitations

The cross-sectional nature of the baseline data provides preliminary understanding of the

importance of demands and resources for employee work attitudes and well-being. These data will subsequently be supplemented by follow-up data, also from a comparison organization, to investigate relations over time.

#### Research/Practical Implications

The paper has great opportunities of identifying important job demands and resources relevant for employee work attitudes, behavior and well-being, and reveal important avenues for management strategies aimed at balancing job demands with adequate resources.

#### Originality/Value

The study adds to the literature by taking a broad perspective on job demands and resources in contemporary working life and by identifying important demands in service production.

### **Working time-related stressors of hospital physicians: An investigation of mediated relationships to health**

Grit Tanner (Univ. of Hamburg)

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#### Purpose

Previous research proved a crucial meaning of working hours in daily work of hospital physicians (e.g., Keller, Aulike, Böhmert, & Nienhaus, 2010). Several additional studies demonstrated ambiguous relationships between working time and aspects of health (e.g., Barnett, Gareis, & Brennan, 1999). This study aims to examine several mediating effects in relationships between hospital physicians' working time and aspects of health to clarify these ambiguous relationships.

#### Design/Methodology

Data were collected in an online survey in German hospitals. Several aspects of hospital physicians' working time (e.g., weekly working hours, time pressure) were measured with items developed on the basis of studies concerning hospital physicians' working conditions (Barnett et al., 1999; Keller, 2010). These items were validated in a pre-test. Additionally, aspects of health were measured, such as burnout and sleeping problems.

#### Results

Several significant mediations were proved in path analysis-based mediation analyses. Fit of working time and personal needs was found to function as mediator also as moderateness of working hours. Furthermore, work-related strain was demonstrated as mediator in some relationships.

#### Limitations

At this moment, a causal interpretation of these results is not possible. The findings should be examined in a longitudinal study.

#### Research/Practical Implications

The study proved several mediators in relationships between working time and aspects of health on a sample of hospital physicians. Future research should investigate the mediating function of the proved factors in other occupations. The results provide approaches for improving working time in hospitals.

#### Originality/Value

The results of this study are an important step in the clarification of impacts of working time.

### **Illegitimate tasks – A meaningful stressor across countries**

Nicola Jacobshagen (Univ. of Bern)

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(Stockholm Univ.), Norbert K. Semmer (Univ. of Bern)

#### Purpose

Task characteristics have been a focus of occupational stress research for many years. Workload and conflicting expectations have been especially prominent in this research. Recently, an additional feature of tasks as a source of stress has been suggested: Their perceived lack of legitimacy. We consider tasks to be illegitimate to the extent that it is perceived as improper to expect employees to do them. For example, tasks can fall outside of the range of one's occupation or role differences within a profession, such as when employees are assigned tasks that do not match their levels of experience.

#### Design/Methodology

We discuss our research with the Bern Illegitimate Tasks Scale in different countries - Switzerland (French and German part), Sweden, and Germany - analyzing scale properties (measurement models) and associations of illegitimate tasks with strain (six data sets, N=2498).

#### Results

The Bern Illegitimate Tasks Scale was shown to be a sound measure, and it explained variance in several strain parameters, above and beyond the effects of other important predictors (stressors and resources).

#### Limitations

All studies were questionnaire studies.

#### Research/Practical Implications

Illegitimate tasks need more attention from supervisors; they should be part of management training. Research should be extended to other designs (e.g., diary studies) and to investigating moderators of the effect of illegitimate tasks (e.g., breadth of role definition).

#### Originality/Value

Our studies show that not just work demands or resources count with regard to stress, but also the perceived legitimacy of demands.

### **How technostress and transformational leadership are related to self-efficacy: A multilevel study**

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#### Purpose

This study examines how the individual level of technostress (i.e., exhaustion, skepticism, anxiety and inefficacy related to technology use) may relate to self-efficacy within a multilevel analytical context. We expect that: (1) technostress relates negatively with self-efficacy, (2) employee's collective perceptions of transformational leadership style relate positively to self-efficacy, and, (3) leadership style would moderate the relationship between technostress and self-efficacy.

#### Design/Methodology

For this study, we sampled 387 workers of an online university (teacher staff and administration) in Spain distributed in 43 work units.

#### Results

A multilevel analysis shows that technostress is negatively related to self-efficacy. The employee's collective perceptions of leadership style are directly and positively related to self-efficacy. Finally and contrary to our expectations we did not find a significant interaction effect of leadership style on self-efficacy.

#### Limitations

A related limitation of cross-sectional research is the potential concern of common method bias. In addition to the aforementioned limitation in future research, should attempt to replicate this model in a bigger sample and



consider more social resources that influence the levels self-efficacy.

#### Research/Practical Implications

The results suggest that teleworkers with technostress perceived lower levels of self-efficacy, feeling unable to successfully perform their tasks at work. However, the results indicate that transformational leadership as perceived by the team has a translevel effect on self-efficacy.

#### Originality/Value

This study shows multilevel antecedents of self-efficacy such as technostress and transformational leadership.

## Daily Work Engagement

Session Chairs: *Arnold B. Bakker (Erasmus Univ. Rotterdam)* [Bakker@fsw.eur.nl](mailto:Bakker@fsw.eur.nl), *Evangelia Demerouti (Eindhoven Univ. of Technology)* [e.demerouti@tue.nl](mailto:e.demerouti@tue.nl)

#### State of the Art

Most research on work engagement has used a between-person or “trait” approach, focusing on differences between individuals in terms of their levels of vigor, dedication, and absorption. This research has revealed that engagement is the result of relatively stable job demands and resources, as well as relatively stable individual differences (personality and personal resources). Possible short-term fluctuations in engagement and their determinants have, however, largely been neglected.

#### New Perspective/Contribution

This symposium brings together five contributions from three European countries focusing on short-term, within-person fluctuations in work engagement. The diary studies focus not only on day-to-day changes in engagement, but also on fluctuations in engagement within the working day (episodes, momentary engagement). The results clearly indicate that engagement fluctuates from one episode to

the other, and from morning to afternoon. In addition, the findings indicate the importance of daily need satisfaction, emotion management, recovery, leadership, and mindfulness for the daily and momentary experience of work engagement.

#### Conclusion and Implications for Research/Practice

A consistent finding across studies is that we are able to predict fluctuations in daily and momentary engagement at work. This insight adds to our knowledge of work engagement, and pleas for more dynamic theoretical models that include a temporal perspective and feedback loops. In addition, the finding that work engagement is a fluctuating state opens the door for new interventions in organizations, such as daily job crafting, daily resource building, and mindfulness training, perhaps through new technological devices (e.g., tablets).

## Presentations of the Symposium

### How daily job crafting increases momentary work engagement: A day reconstruction study

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#### Purpose

Research suggests that employees can increase their own work engagement through proactive job crafting behaviours. In the present study, we tested the hypothesis that daily job crafting would influence work engagement at the work-activity level (momentary engagement), through the satisfaction of three basic psychological needs (autonomy, competence, and relatedness).

#### Design/ Methodology

Eighty employees filled out a survey and a day reconstruction diary on five consecutive



workdays. Job crafting was measured at the day level, whereas psychological need satisfaction and work engagement were measured during work activities over the course of a work day. The dataset included 297 workdays and 2270 work activities.

#### Results

Multi-level analyses showed that daily job crafting behaviors aimed at increasing structural and social resources led to a higher work engagement at the work activity level. Moreover, psychological need satisfaction at the work-activity level mediated direct effects of day-level job crafting on momentary work engagement. Specifically, the effect of daily crafting of structural job resources on momentary engagement was mediated by the momentary satisfaction of the needs for autonomy and competence, and the effect of daily crafting of social job resources on momentary engagement was mediated by the momentary satisfaction of the need for relatedness.

#### Limitations

This study used a small sample and the focus is one working week.

#### Practical Implications

The findings show that employees can influence their own engagement during the day through job crafting behaviors.

#### Originality

This is the first study that investigates how day-level job crafting affects momentary work engagement.

### **Daily work engagement in an emotionally demanding context: An episodic approach**

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#### Purpose

An episodic approach was adopted to explain within-person fluctuations in work engagement over the course of emotionally demanding interactions with clients. It was expected that engagement varies significantly within the same person from one interaction (episode) to the other, over a workday. Further, it was hypothesized that employees who perceive their work as emotionally demanding are more likely to experience emotional dissonance during the interaction that, in turn, relates negatively to their engagement. Consequently, engagement relates negatively to cognitive weariness at the end of the interaction. Finally, it was hypothesized that emotional intelligence moderates the relationship between emotional demands and dissonance and between dissonance and work engagement in a way that these relationships are weaker for emotionally intelligent employees.

#### Design/Methodology

Thirty-five bank employees filled out a survey and a diary for five interactions with different clients during a workday.

#### Results

Engagement showed significant within-person fluctuations over the different work episodes. Furthermore, general perceptions of emotional demands related positively to emotional dissonance during the interaction, which in turn related negatively to engagement. Also, engagement mediated the positive relationship between emotional dissonance during the interaction and cognitive weariness at the end of the interaction. The moderating effects of emotional intelligence were not supported.

#### Limitations

Future studies could replicate these findings in samples from various service occupations.

#### Practical Implications

These findings imply that each interaction at work plays a significant role for employee well-being.

### Originality

This is one of the first studies to explain work engagement during different episodes with clients.

### **Within-day changes of work engagement: The role of psychological detachment and re-attachment to work**

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### Purpose

Research has shown that work engagement fluctuates from day to day. In addition, work engagement may even change within a working day. This study examines within-day changes of work engagement and predictors of this change. It focuses on psychological detachment from work (i.e. gaining mental distance from work) during the previous evening and re-attachment to work (i.e., mentally preparing for work) in the morning.

### Design/Methodology

Data were gathered from 167 persons over the course of ten days, both in the morning and in the afternoon (total of 2,868 measurements).

### Results

Multi-level modeling showed that work engagement was higher in the morning than in the afternoon, with both detachment from work in evening and re-attachment to work in the morning predicting of work engagement throughout the day. Re-attachment to work in the morning attenuated the decline of work engagement from morning to afternoon: on days when employees mentally prepared for work in the morning they maintained a relatively high level of work engagement during the whole day.

### Limitations

This study focused on employees' mental connections to work before starting the working

day; resources available at work that may also influence within-day changes of work engagement were neglected.

### Research/Practical Implications

Employees should be encouraged to detach from work in the evening and to re-attach to work in the morning.

### Originality/Value

This is one of the first studies showing that work engagement changes during the day and that mentally re-attaching to work is an important factor in this process.

### **Transformational leadership and follower work engagement: A diary study on the process**

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### Purpose

Transformational leaders positively affect organizational and employee outcomes, like job performance and organizational citizenship behavior. Although researchers have examined outcomes of transformational leadership, they have largely neglected *why* transformational leadership relates to these outcomes. Besides, although some researchers argue that it may be interesting to study how transformational leadership operates within a short-time period, it has received little research attention. In this study, we hypothesized that the relationship between daily transformational leadership and employee work engagement is sequentially mediated by day-levels of job resources (social support and autonomy) and daily levels of need fulfillment (autonomy, relatedness, and competence).

### Design/Methodology

In this diary study, 61 navel cadets filled out the questionnaire on a daily basis over a period of two weeks.

#### Results

Multilevel regression analyses revealed that daily transformational leadership was positively related to daily work engagement. This relationship was fully mediated by daily job resources and daily need fulfillment. Contrast effects showed that both job resources were equally important mediators in this relationship.

#### Limitations

Future research could focus on transformational leadership as rated by the leaders and could include multiple resources besides the two that were used in this study.

#### Research/Practical Implications

This study shows that transformational leaders can play an important role in their followers work engagement on a daily basis.

#### Originality/Value

This study responds to the call for research on mediators linking transformational leadership to follower outcomes. It also shows that transformational leadership can be examined on a daily basis, thereby opening doors for new research questions.

### **Mindfulness and work engagement: Evidence from a diary and an intervention study**

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#### Purpose

Mindfulness, a state of consciousness in which individuals attend to ongoing events and experiences in a receptive and non-judgmental way, has started to garner attention in the IO

literature in the last two years. Building on theoretical work on the potential role of mindfulness for work-related outcomes and on the mindfulness literature we propose that mindfulness is related to and affects daily work engagement.

#### Design/Methodology

Study 1 was an experimental field study involving 74 employees who were randomly assigned to a mindfulness self-training intervention group or to a no-training control group. Study 2 was a 5-day diary study involving 30 employees providing a total of 150 daily reports of naturally occurring state mindfulness and work engagement in the morning, during work, and after work.

#### Results

Study 1 revealed that the mindfulness intervention led to increases in daily work engagement. Study 2 showed that T1 mindfulness (e.g. morning, during work) was significantly related to T2 work engagement (e.g. during work, end of work). There was also evidence of reverse causation.

#### Limitations

Findings of Study 2 remain to be replicated in a larger sample.

#### Research/Practical Implications

Apart from theoretical implications for the mindfulness and work engagement literatures, the present findings have important practical implications by showing how mindfulness-based interventions in organizations may help increase employee work engagement.

#### Originality/Value

These are, to our knowledge, the first studies to highlight the role of mindfulness for work engagement

## Position Papers

### Employee Social Liability

Rachel Lopes Morrison (AUT Univ., NZ)

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(AUT Univ., NZ)

#### State of the Art

This paper extends current thinking on social and relationship capital to explore the notion that employees can also have *social liabilities*; relationships that work in opposition to any benefits accrued due to having high social capital.

#### Social Capital

Social capital is a broad, multilevel term applied to nations (Fukuyama, 1995), communities (Putnam, 1995), organizations (Leana & VanBuren, 1999), groups (Sorbel, 2002), and individuals (Labianca & Brass, 2006). Most people are embedded in social networks and can therefore take advantage of the wider relationships in which their ties are embedded. At the individual (personal relationship) level of analysis, social capital describes "*circumstances in which individuals can use membership in groups and networks to secure benefits*" (Sobel, 2002, p.139). It is essentially the sum of the resources that accrue to an individual by virtue of possessing networks (Bourdieu & Wacquant, 1992). Social capital therefore has positive valence but is a matter of degree in that, while almost everyone has it, some have more social capital than others.

In this paper, we look specifically at the workplace as the context for these ties and focus on the individual employee as our level of analysis. Thus, if an individual's social capital is his or her network of social connections that assist them in functioning in *society* (Coleman, 1990), *employee* social capital is an employee's network of social connections that assist

them in functioning at *work* (i.e. in their role as employees).

#### Relationship Capital

Relationship capital is that aspect of social capital derived from individual interpersonal relationships, and the value obtained from each relationship within the individual's social network (Clydesdale, 2009). Central here is the notion that functional relationships are "*an asset that needs to be developed and maintained*" (Clydesdale, p. 183), the assumption being that 'more is better'. Relationship capital is currently conceptualized and measured based on two components; trust and reciprocity (Kouvonen et al., 2008; Suzuki et al., 2010). Good relationships are therefore those with high levels of trust and reciprocity, and the assumption is that, the more one has of these, the higher the individual relationship capital.

#### New Perspective/Contribution

While some researchers have noted that bad working relationships may inhibit attaining tasks goals (e.g., Clydesdale, 2009), and that there are resource costs inherent in maintaining 'useless' social connections (Gabbay & Leenders, 2001), the notion that there may be *social relationship liabilities* as the antithesis to social capital does not appear to have been fully canvassed.

#### Relationship Liability

A social network can be (or become) dysfunctional in many ways. For example, by having negative relational norms (such as non-disclosure, favouritism, bullying or sabotage), or by containing individuals with whom negative relationships exist, and where there is a lack of trust and/or reciprocity within the network. Negative social relationships are characterized by the intensity of dislike of employees to other workers created during their working relationships (Labianca & Brass, 2006). Clydesdale (2009) also mentions (albeit briefly) the notion of relationship liability stat-

ing, "...a bad working relationship is a liability that places barriers to the attainment of tasks and goals." (p. 183). Labianca and Brass (2006) also proposed that *negative social capital* could arise from negative relationships with others that detract from work and well-being.

Our point of departure is to conceptualise relationship liability as a stand-alone construct, rather than simply equating to low social capital. And rather than conceptualise social capital or relationship capital as being on a continuum of sorts (from high to low) (e.g., Kouvonen et al., 2008; Suzuki et al., 2010) we propose, instead, that relationship capital and relationship liability are independent of one another; that it is possible, within any social network, for an employee to have relationships that contribute to relationship capital and others that contribute to relationship liability, and some that might do both depending on circumstance.

We posit that individuals can therefore have high (or low) levels of *both* relationship liability and relationship capital, and that relationship liability might not directly detract from relationship capital. While high levels of both would be extraordinarily resource consuming (in terms of managing both positive and negative relationships), low levels of both could suggest impoverished social networks leading to social isolation and marginalisation from organisational support and power structures. It might also be possible for 'good' relationships at work (i.e., those with high levels of trust and reciprocity) to be a liability due to their maintenance costs, potential for task distraction, and higher normative performance pressures.

We aim to test such propositions by developing a scale of relationship capital and relationship liability with different items for each construct. Relationship capital would include trust (*Most people I work with can be trusted*) and reciprocity (*Most of the time people in my*

*company try to be helpful*) items. The relationship liability scale would include mistrust (*I can't be too careful in dealing with the people I work with*) and negative work behaviours (*I suspect that people who I work with are actively working against me*), and also a third factor, social demand (*My workmates take up time I would rather spend on my job*).

#### Conclusion and Implications for Research/Practice

If relationship liabilities can be shown to be a construct independent to relationship capital, there are important implications for research examining the impact of social networks on workplace outcomes for employees, teams, work groups, and to the managers of such individuals. The variance of numerous well-being and outcome variables, including job satisfaction, turnover intention, stress, team conflict, and organisational climate, might also be expected to covary with both individual relationship capital and the extent of relationship liability an employee holds. Furthermore, it would be interesting to determine if some individuals, perhaps because of their personality or social skills, acquire social liability more readily than others thereby making it a staffing and team composition issue. The potential effects of relationship liability to an individual in terms of their engagement and well-being, the ability to cope with stressful work environment and, perhaps more importantly, actually *causing* stress to others has yet to be measured or appreciated.

## Single Papers

### **The nature of psychological conditions of work engagement among employees at a tertiary institution in Durban, South Africa**

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#### Purpose

The objective of this study was to investigate the relationship between three psychological conditions namely, psychological meaningfulness, psychological safety, and psychological availability, job characteristics and work engagement. Furthermore, the study sought to investigate the mediating effects of psychological conditions on the relationship between work engagement and job characteristics.

#### Design/Methodology

A cross-sectional survey design was used with questionnaires as data gathering instruments. The sample consisted of 150 employees at a tertiary institution. Descriptive statistics (mean, standard deviation, kurtosis, skewness, cronbach alpha) was used. Pearson –moment correlation coefficients and multiple regressions were used to analyse the data. Structural equation modelling were used to determine the mediating effect.

#### Results

The result showed that that psychological meaningfulness was the strongest predictor of work engagement and that it mediates the relationship between job characteristics (job enrichment, work role fit and rewarding co-worker relations). Psychological availability did not predict work engagement but indicated a statistically significant correlation with cognitive, emotional and physical resources.

#### Limitations

The first limitations is that 500 questionnaires were sent out and only 150 were returned, which gives a response rate of 30%. Secondly, self-report questionnaires were used and no causal inferences could be made. This was a cross-sectional research design and a longitudinal research design would add more value.

#### Research/Practical Implications

Firstly, the concepts need further research. Secondly, the design of interventions to enhance psychological conditions could enhance work engagement.

#### Originality/Value

The psychological conditions of employees at this tertiary institutions were not been addressed before and this gave alops an opportunity to determine the psychometric properties of the psychological conditions scale.

### **Structural confirmation of the French version of the Oldenburg Burnout Inventory (OLBI)**

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#### Purpose

This study refers to the validation of the Oldenburg Burnout Inventory (OLBI) in a Belgian population. First, the traditional two-factor structure of the instrument, an alternative two-factor model and a one-factor structure were tested. Stability and generalizability of these models were then investigated using replications across various samples. The final objective was to determine relations between OLBI's two dimensions and constructs such as positive and negative occupational states, intention to quit, job satisfaction, supervisor's support and routinization.



**Design/Methodology**

Data gathered from nine samples were used. This represented nearly 4000 participants from different activity sectors. A calibration sample, a validation sample and six different replication samples were investigated. The last sample was used to test convergent and discriminant validity.

**Results**

Confirmatory factor analyses showed that the traditional two-factor model as well as the alternative two-factor structure fits the data better than a one-factor model. Moreover, convergent and discriminant validity assumptions are confirmed.

**Limitations**

The results are not generalizable to the entire Belgian population because of their focus on the French-speaking individuals.

**Research/Practical Implications**

These results validated the French version of the OLBI in a Belgian population. It contributes to help researchers wishing to use an adapted tool for the measurement of burnout within the territory.

**Originality/Value**

It seems that this study is the first to test the validity of the OLBI in a French-speaking Belgian population.

### **Burnout beyond the individual: Societal influences on burnout and its processes**

*Diana Boer (Jacobs Univ. Bremen, DE)*

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**Purpose**

This presentation provides novel perspective on societal influences on mean levels and processes of emotional exhaustion. More precisely, we investigate whether cultural values, societal wealth and population descriptors

(such as density) influence the extent to which emotional exhaustion is experienced and buffered by support mechanisms.

**Design/Methodology**

Two country level meta-analyses were conducted. The first meta-analysis assessed the influence of individualism and societal wealth on average levels of emotional exhaustion while controlling for methodological and sampling variations. The second meta-analysis tests whether cultural values, societal wealth and population density influence the buffering mechanism of social support on emotional exhaustion.

**Results**

The multilevel analysis showed that (a) lower mean levels of emotional exhaustion were associated with individualism, whereas wealth was not a unique predictor, and (b) social support has lower effects on reducing emotional exhaustion with increasing societal population density, while different sources of social support show varying buffering effects.

**Limitations**

Individual level factors are not considered in this meta-analytical approach. Additional cultural and social influences are likely.

**Research/Practical Implications**

These results indicate important context influences on the levels and processes of employee wellbeing. Greater autonomy influences employee wellbeing positively while greater wealth only contributed indirectly to wellbeing. Population density may be an additional source of stress which affects inter-individual support mechanisms for preventing and reducing negative employee wellbeing.

**Originality/Value**

Novel meta-analytical methods are employed for revealing country level influences on the psychological mechanisms of employee wellbeing.

### **Fatigue, vigor and dedication: the role of job-related emotions**

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#### **Purpose**

The aim of the study was to examine the role of job-related positive and negative emotions between acute fatigue at work and engagement. We tested two components of engagement: vigor (energetic aspect) and dedication (motivational aspect). We hypothesized that negative emotions mediate in energy depletion process and positive emotions mediate in broadening of energetic and motivational resources.

#### **Design/Methodology**

Fatigue was measured by an index in accordance with the Japan Society for Occupational Health. The Utrecht Work Engagement Scale – short version (UWES) was used to evaluate vigor and dedication (Schaufeli, Bakker, & Salanova, 2006). Job-related affective well-being (JAWS) was used to assess positive and negative emotions (Van Katwyk et al., 2000). The study group consisted of 174 police officers (the average tenure of 10 years, range 1–23).

#### **Results**

Baron and Kenny approach and the Sobel test supported our hypotheses. Fatigue was more negative related to vigor than dedication. We observed that positive and negative emotions fully mediated between fatigue and vigor (large effect size  $f^2 = .36$ ). Additionally, positive emotions fully mediated between fatigue and dedication (medium effect size  $f^2 = .16$ ). We confirmed these results by the Sobel test.

#### **Limitations**

The correlational design was applied.

#### **Research/Practical Implications**

Our results indicate that in police officers positive emotions may lead to broadening of energetic and motivational resources and negative emotions may reduce energetic ability to work among police officers.

#### **Originality/Value**

To our knowledge the study is one of the first to simultaneously analyze the role of positive and negative emotions in the profession with a high psychosocial risk at work.

### **Trends in and longitudinal trajectories of work intensification. Empirical evidence from international datasets**

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#### **Purpose**

This study aims to complement previous research on work intensification by showing current trends and longitudinal trajectories of work intensity as well as by identifying risk-groups.

#### **Design/Methodology**

We analysed representative datasets from Europe and the US from 2000 onwards. Cross-sectional data (EWCS) were analysed with trend analyses, panel data (G-SOEP,  $N=24219$ ; HRS,  $N=8651$ ) were analysed using Growth Mixture Modeling.

#### **Results**

Work intensification occurred in Germany, Spain and France, but not in Finland and the UK (EWCS). Generally, less educated workers are the most affected. Based on panel data four (G-SOEP,  $entropy=.63$ ) and three (HRS,  $entropy=.61$ ) classes of work intensity trajectories were identified, indicating that employees can be assigned to distinct groups, differing in the amount of experienced work inten-

sification. In Germany and the US, two comparable groups emerged, making up around 80% of the samples. One group was characterized by continuous high levels of work intensity (G-SOEP, 55.2%; HRS, 36.2%), the other group by a slight increase in work intensity starting from a low level (G-SOEP, 26.2%; HRS, 53.1%). Compared to the 'high-level group' members, the 'slight-increase group' members were less educated, older and more likely to be male.

#### Limitations

No conclusions regarding work-related outcomes or well-being can be drawn. Future research should therefore compare groups of work intensity trajectories regarding these aspects.

#### Research/Practical Implications

As European and American employees are confronted with work intensification or continuous high levels of work intensity, protective factors for future work are becoming more important.

#### Originality/Value

This is the first study analysing longitudinal change patterns and identifying 'risk-groups' concerning work intensification.

### **Technological advances in working practices: Implications for employee psychological well-being**

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#### Purpose

Rapid, and revolutionary, technological advances, such as the increasing automation of job roles, have occurred in Western society in recent years. These have changed the way we live our lives and also have implications for the way we work (Hislop and Axtell, 2009). According to the conservation of resources (COR) theory "promotion of wellbeing and prevention of stress depend on the availability

and successful management of resources" (Hobfoll, 2001). Drawing on this theory, this paper explores how some technological changes have restricted the availability of resources to employees, and led to the depersonalisation of the workplace.

#### Design/Methodology

A mixed-methods case study of a large public sector organisation in the UK was conducted. Findings from the semi-structured interviews (n=31) and from qualitative diaries, which were completed twice a day for a two week period (n=11), will be presented here.

#### Results

Drawing on principles of Grounded Theory (Glaser and Strauss, 1967), qualitative analysis established that technological changes influencing working practices can affect access to, and availability of social support and, the potential adverse effects of this on employee well-being.

#### Limitations

Findings and implications will be pertinent to certain professions, or to specific job roles.

#### Research/Practical Implications

Results suggest that organisations need to be aware of the potential adverse effect on employee well-being of technological changes aimed at achieving organisational level goals, and to consider ways to offset these.

#### Originality/Value

To date, few studies in work and organisational psychology have qualitatively explored the effects of technological changes in working practices on employee psychological well-being.

### **Beyond task-related stress – New ways of researching stress in flexible work arrangements**

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### Purpose

Employment has altered in the last decades. Flexible work arrangements like temporary work have grown in importance. This has implications for stress research. Specific stress, stemming from the employment itself is not covered by classical task-related stress concepts like the job-demand-control model. Within flexible work, stress needs to be assessed concerning both task-related stress and employment-related stress. Drawing on JD-R theory we aim to expand Lewchuck et al.'s (2005) concept of employment strain and introduce employment-related demands and resources.

### Design/Methodology

We conducted two surveys: In Study 1 (N=167), a new instrument capable of measuring employment-related demands and resources was developed. In Study 2 (N=512) the instruments structure was confirmed. Furthermore we tested for incremental validity of employment-related demands and resources beyond task-related aspects of stress. Thirdly, we addressed possible interactions between employment-related stress and task-related stress.

### Results

EFA led to a 12 factor model that was confirmed with CFA in the second study. Hierarchical regression analysis provided evidence for incremental validity, moderated regression analysis revealed significant interactions.

### Limitations

Both our samples were young and some participants pursued an alternate career to their current one. This might underestimate the effect of conventional task-related stress in our samples.

### Research/Practical Implications

It might be that employees in flexible work arrangements are under a double risk: 1. They face poor designed jobs and 2. They are con-

fronted with new sources of stress, stemming from the employment itself.

### Originality/Value

We advance stress research as we provide empirical evidence for the employment relationship as a new source of stress within flexible work.

## **Short-term effects of task restructuring on well-being: The buffering potential of workplace-learning**

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### Purpose

Organizations need to be able to effectively implement structural changes in order to adapt to the dynamic environment. In this paper we focus on task restructuring as one of the most frequently occurring types of change in contemporary knowledge society. In spite of its evident prevalence, until now research on task restructuring and employees well-being has been scarce. In this paper, based on Conservation of Resources Theory, we argue that task restructuring has a negative effect on employees well-being (in terms of emotional exhaustion and vigor) in the short-term. Furthermore, we advance that opportunities for learning through reflection and experimentation, as well as recently acquired KSAO's can serve as a buffer in the relation between task restructuring and well-being.

### Design/Methodology

Hierarchical regression analyses and simple slope analyses have been conducted in order to test the research hypotheses on a large representative sample of the Dutch working population (N = 1711).

### Results

Task restructuring had a positive influence on emotional exhaustion but did not significantly affect employees' vigor. Furthermore, recently acquired KSAO's, as well as opportunities for reflection and experimentation buffered the relation between task restructuring and emotional exhaustion. Opportunities for reflection and experimentation moderated the relation between task restructuring and vigor as well.

### Limitations

The hypotheses in this study have been tested on cross-sectional data. Hence we could not draw conclusions on the directionality of the hypothesised relations.

### Originality/Value

This study adds to the scarce research on the effects of task restructuring on well being. Additionally, it suggests that workplace learning has the potential to mitigate the negative relation between task restructuring and well-being.

## **Contact center as new forms of work organization: The triangular relationship between worker, contact centers and contractors and well-being at work**

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### Purpose

The new forms of work organization are characterized by different evolutions: multiple workers status, fragmentation of collective work, etc. Among these evolutions, the triangular relationship between worker, employer and contractors and the intervention of contractors in work organization (Marchington et al., 2004) may be particularly affecting the well-being of workers. This research focus on contact center as a new form of work organization to investigate the influence of the tri-

angular employment relationship on well-being at work.

### Methodology

A quantitative and qualitative approach was used. A survey based on Job Demand-Resources Model (Bakker, Demerouti & Schaufeli, 2003) was conducted among 400 operators from Belgian contact centers to compare internal, outsourced and external contact centers. Three case studies allowed exploring more deeply the influence of triangular employment relationship on well-being. Finally, focus-groups with unions and management representatives helped us to design some practical recommendations.

### Results

Quantitative results indicate that operators from outsourced and external contact centers have a poorer perception of demands and resources at work. They are consequently more likely to report high levels of perceived stress and burnout and low satisfaction with their work. The case studies give us more information about the role of the strategy and the management style of contact centers in coping with triangular employment relationships.

### Limitations

Beyond this explorative research, quantitative data can be further used in multi-sample modeling approach.

### Research/Practical Implications

Recommendations for well-being at work regarding the triangular employment relationship, on which both employers and unions converge, will be highlighted at the conference.

### Originality

This research combines organizational psychology and management theory.

## Associations between vigor, exhaustion and recovery during the workweek: A Person-centered approach of daily assessments

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### Purpose

The purpose of this study was to investigate (1) how vigor and exhaustion are experienced during the workweek; (2) the associations between these two experiences; and (3) their relationships with recovery experiences.

### Methods

The present diary study of five consecutive work days titled “Interconnections between work and private life experiences” was conducted in Finland during April-May 2010 among Finnish health care and service sector employees ( $n = 256$ ). Growth Mixture Modeling (GMM) performed with the Mplus statistical package was used as a main statistical tool.

### Results

Vigor and exhaustion showed a strong negative inter-dependence ( $r = -.66$ ) within and between-days but by applying a person-centered analysis we were able to distinguish three groups, showing meaningful variations in vigor and exhaustion. The groups were *Constantly vigorous* ( $n = 194$ ), *Concurrently vigorous and exhausted* ( $n = 30$ ) and *Constantly exhausted* ( $n = 28$ ). *Constantly vigorous* employees were well recovered from work strain during the work week whereas employees in the *Constantly exhausted* group recovered poorly.

### Limitations

It would be valuable to investigate also the other dimensions of burnout and work engagement as well as different recovery strategies during the workweek.

### Practical Implications

Recovery was associated with occupational well-being, implying that stress management interventions should aim at improving employees' possibilities for recovery.

### Originality

The novel aspect of the study was to clarify the association of exhaustion and vigor from a day-to-day and person-centered perspective.

## Differential effects on performance of daily recovery at work and after work

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### Purpose

Literature related to recovery at non-working activities has shown its important influence on well-being and organizational outcomes. From Job Demands-Resources (Bakker & Demerouti, 2007) and Stressor-detachment models (Sonnentag, 2011), role ambiguity, role conflict and interruptions at work were expected to reduce recovery experiences and performance while servant leadership was expected to enhance recovery. Besides, we argued that recovery at work would enable more adaptability to daily requirements than recovery after work reducing work demands effects and showing higher relations to performance.

### Design/Methodology

A diary study was conducted with workers ( $N=89$ ) during five consecutive work days in which measures were recruited three different moments per day.



### Results

Multilevel analyses were conducted with MLwiN2.11. Daily performance was predicted by recovery at work ( $b=.152$ ,  $0.051$ ) but not by recovery after work ( $b=-.043$ ,  $0.045$ ). Recovery at work partial mediate the effect of interruptions on performance ( $z=-2.454$ ,  $p=.014$ ) and was negatively related to role conflict ( $b=-.092$ ,  $0.039$ ) and positively predicted by servant leadership ( $b=.187$ ,  $0.063$ ).

### Limitations

Studies are needed to know which activities at work provide opportunities for recovery and to compare the long and short term possible differential effects of recovery at and outside work.

### Research/Practical Implications

Results show that recovery at work is important to deal with work interruptions and for achieving daily work goals.

### Originality/Value

The study analysed the effects of recovery both, at work and after work, to compare their importance to achieve organizational goals from a daily basis.

## **Teleworkers' recovery behaviour: Does better work-family balance impair psychological wellbeing?**

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### Purpose

Teleworking is increasingly popular in Western developed countries. On the one hand it helps organizations to save facility costs, on the other hand some evidence suggests that teleworkers perceive higher job satisfaction and associate working at home with higher productivity.

Working time regulations, such as rest break provision, entitle employees' recovery rights

in order to protect their wellbeing and performance. In addition to regulations, social norms and rituals influence how often and long employees take rest breaks in conventional offices. Little is known about teleworkers' recovery behaviours. The purpose of this study is to examine teleworkers' rest break behaviour and how it is related to their psychological wellbeing.

### Design/Methodology

Online questionnaire data on home office use in the year 2012 from 266 routine teleworkers (mean age = 41.5 years; 51.8% women) of different sectors and companies was analysed.

### Results

The three most frequent rest break activities were to drink or eat something (25%), to do housework (17%), and to read something (8%).

Multiple regression analyses conducted with SPSS 19 ( $p = .01$ ) showed that the perceived frequency of rest breaks was not associated with psychological wellbeing, whereas the activity to do housework during rest breaks decreased wellbeing. Moreover, good health, high satisfaction with the housing, and high satisfaction with teleworking were associated with high psychological wellbeing. Regression analyses showed no influences of age, sex, household size and seven other break activities on psychological wellbeing.

### Research/Practical Implications

The results indicate that a typical recovery behaviour that teleworkers practice to improve their perceived work-family balance may in fact impair their psychological wellbeing.

### **The impact of unfinished tasks on employees' weekend recovery: The moderating effect of leaders' high performance expectations**

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#### **Purpose**

Previous research has shown that time pressure negatively impacts employees' wellbeing and recovery. Yet, we expect that the perception of not having completed and finalized ones work tasks adds to the effect of time pressure on employees' recovery, specifically their detachment and engagement in mastery experiences. Building on prior work examining the influence of leadership behavior on recovery, we suggest that leaders' performance expectations moderate the effect of unfinished tasks on detachment and mastery: When employees have the feeling of not having finished the week's work tasks, they detach less from work and engage in less mastery experiences if they perceive their leader to set high expectations.

#### **Design/Methodology**

65 employees of an IT company responded to a questionnaire at the end and at the beginning of the working week. Hierarchical linear analyses were conducted in which unfinished tasks, time pressure and leadership behavior during the week predicted detachment and mastery experiences during the weekend.

#### **Results**

The results indicate that (1) unfinished tasks explain incremental variance over the effect of time pressure on detachment and mastery; and (2) leaders' performance expectations moderate this effect.

#### **Limitations**

Results might be specific for knowledge workers working on problem solving tasks, which stimulate ongoing reflection processes.

#### **Research/Practical Implications/ Originality/Value**

The results stress the importance of unfinished tasks impacting employees' recovery and shed light on the role of leadership. From a practical point of view, these findings show new directions for leadership training, as the leaders' challenge is to support employees if they are not able to finish their tasks in time.

### **Off-job recovery experiences matter! Rumination, problem-solving, and detachment as predictors of creative thinking at work**

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#### **Purpose**

The purpose of this study is to explore the influence that off-job recovery experiences (affective rumination, problem solving pondering, and detachment) measured after work have on creativity measured the following day at work. According to the componential theory of creativity, four creative processes are studied in the present research: problem identification, preparation, response generation, and response validation.

#### **Design/Methodology**

To test the influence of recovery experiences on creative processes, 56 employees from the research and education sector in Spain and The Netherlands completed daily surveys over a period of five consecutive work days.

#### **Results**

Multilevel analyses show that affective rumination is unrelated to the creative processes and negatively relates to recovery. Problem-solving pondering is positively related to all creative processes and negatively relates to recovery. Finally, detachment is unrelated to

the creative processes and positively relates to recovery during the subsequent work day. The results demonstrate that there are daily changes on employees' off-job recovery experiences, which have an impact on their recovery feelings and creativity at work the next day.

#### Limitations

A limitation concerns the reliance on only self-report measures, which may lead to common method variance.

#### Research/Practical Implications

Organizations should find strategies to help employees engage in problem-solving pondering as opposed to affective rumination. Problem-solving is less detrimental for subsequent feelings of recovery and beneficial for creativity at work the next day.

#### Originality/Value

To our knowledge, this study is the first to empirically test the effect that recovery experiences have on creative process at work the next day.

### **Job demands and work-family conflict: The moderating role of recovery experiences**

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#### Purpose

Work-family conflict (WFC) can have important consequences for individuals' well-being. In response to calls for research on the link between WFC and recovery (Sanz-Vergel et al., 2010), and extending the job demands-resources model (Bakker & Demerouti, 2007; Kinnunen et al., 2011), the present study aims at understanding whether recovery experiences can moderate the positive relationship between job demands and WFC.

#### Design/Methodology

The present study involved 617 Italian workers. The self-report questionnaire measured workload, emotional demands, WFC, recovery experiences (psychological detachment, relaxation, mastery and control). Data analysis was conducted using PASW18 for descriptive analysis, correlations, and hierarchical regressions.

#### Results

Results revealed a strong positive relationship of workload with WFC and a weaker positive relationship of emotional demands with WFC. Moreover, all the four recovery experiences showed a negative relationship with WFC. Regarding the hypothesized interaction effects, the relationship between workload and WFC was particularly strong under condition of low (vs. high) psychological detachment, low relaxation, and low control (explained variance was 31%, 32%, and 32%, respectively). Regarding the relationship between emotional demands and WFC, none of the moderating effects was significant.

#### Limitations

The cross-sectional design and self-reports can be considered as limitations. Future longitudinal or quantitative diary research should try to replicate the findings.

#### Research/Practical Implications

The study suggests that recovery experiences are very important to prevent the undesirable impact of workload on WFC. Thus, organizations should advocate the norm that leisure time should be used to engage in recovering experiences.

#### Originality/Value

This study, one of the first on this topic, highlights the importance of recovery experiences for preventing WFC.

## Expanding the dimensionality of work stressors: Introducing threat job demands

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### Purpose

The challenge-hindrance stressor framework has proven useful for explaining inconsistencies in relationships between stressors and important organisational criteria (e.g., retention, engagement, psychological health). Challenge stressors are viewed as having potential for growth and mastery and hindrances as obstacles to learning and goal attainment. We challenged the status quo by introducing a third dimension, based on the transactional model of stress: threat stressors, appraised as having potential for personal harm/loss. We expected threats to be positively associated with psychological distress and emotional exhaustion, and negatively associated with engagement.

### Design/Methodology

Survey data were collected from 617 retail workers, 221 of whom responded 6 months later. Data included measures of challenges, hindrances, threats, emotional exhaustion, dedication, and psychological distress.

### Results

CFA results supported a three-factor stressor structure. SEM via AMOS showed that threats were linked to increased psychological distress and emotional exhaustion, and reduced dedication. Hindrances undermined dedication but were not related to distress or exhaustion. Although challenges increased exhaustion, they promoted dedication and were associated with lower distress.

### Limitations

Generalizability is unclear at this stage. Future research should utilize measures other than self-report surveys.

### Research/Practical Implications

Threat stressors appear to be a stronger contributor to psychological health and well-being than hindrances. The major psychosocial processes proposed in job characteristics models of work stress (e.g., JDR model, DCS model) can be augmented by the inclusion of threat job demands.

### Originality/Value

Knowledge of the dimensionality of work stressors is advanced by introducing a three-dimensional structure and identifying differential relationships with key outcomes.

## Impacts of ages, education and work demands on workers' well-being

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### Purpose

Due to previous research results, perceived level of well-being depends on workers' ages and work demands. Comparison of well-being between age groups, work demands, and education level should clarify impacts on well-being.

### Design/Methodology

Analyzed: 2631 financial workers from 2006 to 2011.

Workers estimated perceived level of well-being with QAA from AH-Model. Obtained values were analyzed according to ages, work demands, and education.

### Results

The highest level of perceived fatigue was in 2006 in the time of economic rise of Slovenia. Huge amount of work reflected on well-being

decrease in all groups. Low level of perceived well-being was in the group of women with middle level of education, and professionals (in front office and follow-up activities in back office). They reported higher level of exhaustion, stress, and overload. University degree workers reported adequate perceived well-being – balance between work demands and workers education was adequate. According to ages, the lowest level of well-being was above 50. Majority of these workers were with middle level of education. The most demanding working places were customer service, analyses, and information support.

#### Limitation

Data about workers' health status were not included.

#### Practical Implications

The highest level of exhaustion is combined reflection of ages and not adequate education. Workers with adequate level of flexibility are those with university degree – able to work above 60.

#### Value

Investments in keeping the adequate level of flexibility is promising preventive measure to keep adequate level of workers well-being – external manifestation is achieved level of education.

### **Positive core self evaluations acts as a buffer between job demands and strain reactions**

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#### Purpose

Contemporary theory claims that the presence of job related resources will weaken the relationship between job demands and negative strain reactions. In the present paper this idea is extended by focusing on personal resources that are not inherently related to the job,

namely core self evaluations (CSE). This general trait represents an individual's evaluation of the self and is composed of four personality traits - self-esteem, locus of control, general self-efficacy and emotional stability. The present paper tested whether CSE function as a personal resource and thus act as a buffer between job demands and strain reactions.

#### Design/Methodology

Hypotheses were tested in three independent studies using different operationalizations of job demands (self-reported emotional and physical job demands, shift work) and different operationalizations of psychological distress (depression, irritation) with samples drawn from different organizations (N = 68, N = 172, N = 174).

#### Results

All three studies showed that CSE moderated the relationship of job demands with psychological distress as represented by the constructs depression and irritation. These results indicate that CSE functions as a personal resource and acts as a buffer between job demands and negative strain reactions.

#### Limitations

Although confirmed by three studies, the analyses remain cross-sectional.

#### Research/Practical Implications

Findings highlight the role of CSE as a personal resource that may help employees handle job demands.

#### Originality/Value

Our study provides an extension of contemporary stress models by shedding light on a personal resource as potential buffer between demands and strain reactions.

### **The relationship between job demands and job boredom: Exploring the moderating effect of job control and education**

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#### **Purpose**

Job boredom is an understudied area of employee well-being, despite the evidence of its negative consequences for individuals and organizations. Based on Job demands and control (JDC) -model, this study examined the relationship between "passive jobs" (low job demands and low job control) and job boredom, and particularly the conditions for the often assumed negative relationship between job demands and boredom. Although job boredom is often proposed to increase with the growth of educated workforce, the dominating assumption concerning the relationship between demands and boredom has neglected the less educated employees. Thus, the moderating effect of education was investigated in an attempt to expand current boredom research.

#### **Design/Methodology**

Hierarchical regression analysis was employed in testing 2-and 3-way interaction effects in a sample of 657 employees from 18 Finnish private sector organizations.

#### **Results**

Education moderated the relationship between job demands and job boredom. The less educated employees experienced more boredom when demands were high, whereas the opposite applied for higher educated employees. No interaction effects of job control were found.

#### **Limitations**

The study is limited by cross-sectional study design and self-report data. Furthermore, the average level of job boredom was low.

#### **Research/Practical Implications**

The study has implications for theory concerning the role of job demands in experiencing job boredom, as well as for job redesign to manage boredom.

#### **Originality/Value**

The dominant view of the relationship between low demands and boredom is contrasted by showing that in certain conditions high demands may be a source of job boredom as well.

### **The relationship between stress and objective sickness absence: The role of psychosocial work environment**

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#### **Purpose**

The health impairment process of the Job Demands-Resources model posits that perceived job demands lead to job strain (e.g. emotional exhaustion), which in turn is related to increased sickness absence. Sickness absence constitutes a strategy to save energy, provide an opportunity for recuperation, and detach oneself from a stressful, non-rewarding, non-supportive, and conflictual work environment. The current study aims to test the mediational role of emotional exhaustion in the relationship between job demands (e.g. work-family conflict) and sickness absence frequency. Additionally, we hypothesize that this mediated relationship is moderated by available job resources (e.g. job autonomy and personal development).

#### **Design/Methodology**

Data were collected by questionnaire and objective data in a sample of 234 employees (51.7% women; mean age= 43.6; SD= 8.8) working in the headquarters of a retail chain.



### Results

Results supported the mediational role of emotional exhaustion in the relationship between job demands and sickness absence frequency. Additionally job resources moderate this mediated relationship.

### Limitations

We used a cross-sectional design that precludes causal interpretation of the postulated relationships.

### Research/Practical Implications

Our findings have important implications for organizations that aim to reduce costs related to absenteeism and improve productivity by changing the psychosocial work environment, i.e. job demands and job resources, in order to lower exhaustion.

### Originality/Value

The methodological strength of this study is that data on sick leaves were obtained from an objective source, that is the personnel department of the organization. We also contributed to the understanding of the role of the psychosocial work environment in the relationship between emotional exhaustion and sickness absence.

## Work engagement in times of crisis: A multilevel study

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### Purpose

Building on the differentiated job demands-resources model, this study set out to determine the relationship between economic crisis perceptions and employee engagement, investigating the moderating role of line manager's empowering leadership behaviour.

### Design/Methodology

During the summer of 2009, a survey was conducted in a Belgian service organization

that was heavily impacted by the economic crisis. Based on a dyadic sample of 55 supervisors and 129 employees, we performed two-step cluster analysis and structural equation modelling to test our hypotheses.

### Results

Our results indicate that perceived impact of the crisis was negatively related to employees' work engagement. Second, the two-step clustering method indicated that line managers could be grouped into three clusters based on the extent to which they fulfil employees' empowering leadership expectations. Interestingly, cluster membership moderated the relationship between perceived impact of the crisis on the one hand and employee engagement on the other hand.

### Research/Practical Implications

Our study contributes to the engagement literature by investigating the relationship between line manager's leadership empowerment behaviour and subordinates' work engagement. As such, our results advance research to the role of the line manager in motivating employees in times of crisis.

### Originality/Value

To our knowledge, this is the first empirical study to investigate the impact of the crisis on employee motivation, using matched data from employees and their supervisors.

## Volunteering as a compensatory leisure-time activity: The role of job characteristics

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### Purpose

Building on theories of work/non-work enhancement (e.g. Greenhaus & Powell, 2006), it has recently been shown that volunteering, although a demanding leisure time activity, can buffer the negative effect of work-related

stress on employees' wellbeing. Elaborating on these initial findings we hypothesized that the benefits of volunteer work should differ substantially depending on the design of the volunteer activity. Furthermore we assumed, more generally, that need satisfaction through volunteer work compensates for a lack of need satisfaction in the workplace.

#### Design/Methodology

To test these assumptions, 2796 Red Cross volunteers from eight European countries, who were at the same time in paid employment, were asked to rate the job design of their volunteer work (WDQ), variety, autonomy and stress regarding their paid employment, as well as paid work satisfaction, life satisfaction and health.

#### Results

Multilevel analyses showed that volunteer work with a high motivating potential significantly reduces the negative impact of stress at work on self-reported health, that job characteristics of paid and volunteer work have an additive effect on life satisfaction, and that job characteristics of volunteer work can compensate for job characteristics lacking in paid work.

#### Limitations

It remains to validate these findings by including non-subjective measures, particularly of stressors and health.

#### Research/Practical Implications

The study implies that not volunteering per se has the potential to increase employees' wellbeing, the specific design of volunteer activities matters.

#### Originality/Value

To our knowledge, the study is the first to analyze the interactions of paid work and volunteer work characteristics on individuals' well-being.

### A four factor model of flow specific metacognitions

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#### Purpose

Flow is a state of task absorption and intrinsic enjoyment (e.g. Csikszentmihalyi, 1990). Flow has been reported to occur during various everyday activities and achievement situations (e.g. Schüler & Brunner, 2009). Recently the importance of investigating 'metacognitions of flow', i.e. self-regulatory aspects of the flow state, has been raised (Moneta, 2012). The adaptive effects of wider adaptive metacognitions have been established (Beer & Moneta, 2010). The aim of this study was to produce and validate a measure of flow specific metacognitions.

#### Design/Methodology

A pilot scale was tested on 187 UK based students. Principal component and parallel analysis were performed. Confirmatory factor analyses and regression analyses were run on a worker sample (N=193).

#### Results

Four flow specific metacognitions were identified on the student sample. Confirmatory factor analysis supported the initial four factor solution on the worker sample. In the latter, flow specific metacognitions explained differences in flow in work (Engeser, & Rheinberg, 2008) above and beyond maladaptive (Wells & Cartwright-Hatton, 2004) and adaptive metacognitions (Beer & Moneta, 2010) as identified via hierarchical regression analysis.

#### Limitations

The flow specific metacognitions identified may only be a sub-set of a larger number of possible metacognitions. In addition, longitudinal analysis would be required to determine the stability of this construct over time.

### Research/Practical Implications

This research may have important implications in explaining individual differences in the mechanisms underlying flow experiences, particularly in achievement situations.

### Originality/Value

To the knowledge of the authors, this is the first time where the systematic measurement of flow specific metacognitions has been described.

### Positive gain cycles at work: From self-leadership, to work engagement and individual innovation

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Taking the Conservation of Resources Theory (Hobfoll, 1989) as a starting point, this study examined longitudinal relationships between personal resources (self-leadership and individual innovation) and work engagement. We hypothesized that self-leadership's dimensions (behavior focused strategies, natural reward strategies, and constructive thought pattern strategies) reciprocally influenced individual innovation indirectly through their impact on work engagement over time. In order to test the hypotheses we conducted a two wave longitudinal field study with 101 engineers.

Results of structural equation modeling analyses supported our hypotheses. The model that fit best was the reciprocal model. Specifically, we found that T1 self-leadership dimensions related positively to T2 work engagement and that T1 work engagement related positively to T2 individual innovation. Additionally, T1 individual innovation related positively to T2 work engagement and T1 work engagement related positively to T2 self-leadership dimensions. Further, a positive

effect of time from time 1 to time 2, specifically regarding constructive thought pattern strategies suggests the existence of a gain cycle.

The present findings suggest that self-leadership, work engagement and individual innovation, cannot be defined only as hypothetical antecedents or outcomes of psychological processes. Rather, the relationships between these variables indicate a dynamic relationship between them. Further, they support the assumption of the Conservation of Resources Theory that, personal resources (self-leadership and individual innovation) and well-being evolve into a positive cycle that may determine employees' successful adaptation to work environments.

### The influence of workaholism and work engagement on work motivation: A longitudinal approach

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#### Purpose

Drawing on Deci and Ryan's Self-Determination Theory (SDT), the present study examined how need satisfaction affects work motivation (i.e., external regulation, introjected regulation, identified regulation, and intrinsic regulation) and how work motivation affects workaholism and work engagement.

#### Design/Methodology

Drawing on a two-wave sample, Structural Equation Modeling was used to test the research model.

#### Results

In line with SDT, the longitudinal results revealed that a high level of need satisfaction impedes external and introjected regulation and facilitates intrinsic motivation. Interestingly, the results revealed also that a high level of

workaholism increases introjected and identified regulation and reduces intrinsic regulation. A high level of work engagement facilitates identified and intrinsic regulation.

#### Limitations

The present study has two main limitations. It is based on a convenience sample and it relied exclusively on self-report data.

#### Research/Practical Implications

In spite of these limitations, it improves our understanding of the relationships between workaholism and work engagement on the one hand and work motivation on the other hand. Furthermore, it supports the basic assumptions of SDT and underlines the value of SDT as a theoretical framework in the field of occupational health psychology.

#### Originality/Value

The present study is one of the first longitudinal studies on workaholism, work engagement, and work motivation. Prior research already showed that workaholism and work engagement are associated with work motivation. The present study extends this knowledge by examining the direction of these relations. It provided evidence for reversed relationships between workaholism and work engagement on the one hand and various forms of motivation on the other hand.

### **The experience of engagement within the working day: A mixed methods study**

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#### Purpose

Although research on engagement has flourished, there has been little attempt to examine the experience of engagement within the working day itself (Bakker et al, 2011). The purpose of this study was to identify what key

factors are involved in individuals' engagement within the working day. More specifically it aimed to explore the types of affective events (Weiss & Cropanzano, 1996) that underpin the most and least engaging situations during the workday.

#### Design/Methodology

A mixed methods approach was taken whereby employees from two organisations participated (N=26: 22). These individuals completed a 6-day quantitative work diary and a semi-structured qualitative interview. Data from each source was analysed separately, and then triangulated to give a fuller interpretation.

#### Results

Affective events were found to have an important role within daily experiences of engagement. Particularly significant were events that involved job design and job fit, management practices, and co-worker relations. In addition, regulatory processes, consistent with conservation of resources (COR- Hobfoll, 1989) theory, were also critical.

#### Limitations

Findings may be limited to the current UK context, and restricted by the relatively small sample size.

#### Research/Practical Implications

The findings suggest that affective events and COR theories are useful for understanding engagement. Furthermore, practical interventions that apply these theories to job design, management practice, co-worker relations, and to individual coaching may help foster and sustain engagement.

#### Originality/Value

This study is one of the first to explore engagement using a mixed methods approach, and to examine the 'most' and 'least' engaging situations within the working day.

### **The protective role of personal resources in minimising exposure and effects of harassment: Combining within- and between-person approaches**

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#### **Purpose**

Workplace harassment is a serious psychosocial occupational risk factor. Despite a wealth of empirical study, little research has examined the link between personal resources (optimism and self-efficacy) and harassment. Accordingly, we investigated a potential loss spiral between harassment, personal resources, and emotional exhaustion using both between-person and within-person approaches.

#### **Design/Methodology**

Survey data were collected from 221 retail workers at two time-points spaced six months apart. In addition, a six-week diary was completed by a separate sample of 45 workers employed in various occupations.

#### **Results**

Within-person variability in harassment was 34%. Hierarchical linear modelling in MLWin showed that weekly personal resources minimised weekly exposure to harassment and mediated the positive relationship between harassment and weekly levels of emotional exhaustion. SEM in AMOS revealed similar patterns across workers over a longer six-month timeframe, with reciprocal paths between harassment and personal resources across the two time-points producing the best model fit.

#### **Limitations**

Future research should utilize measures other than self-reports. Generalizability is unclear at this stage – workers with different demographic characteristics may differ in likelihood

of experiencing harassment or in levels of personal resources.

#### **Research/Practical Implications**

When harassment cannot be prevented entirely, boosting levels of personal resources can stop workers from becoming victimised and minimise the negative consequences of harassment.

#### **Originality/Value**

The findings confirm the loss spiral of harassment via personal resources, and likewise the protective effects of personal resources. Now that we have identified within-person variability in harassment, future research should focus on the predictors of such change.

### **Regulatory focus as a mediator in the job demands-resources model**

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#### **Purpose**

Applying regulatory focus theory (Higgins, 1997) to employee well-being and motivation, this study examined the mediating role of regulatory focus in the Job Demands-Resources Model (JD-R Model; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). We expected that prevention focus would be a mediator in the exhaustion process, whereas promotion focus would be a mediator in the motivational process.

#### **Design/Methodology**

A study was conducted among 751 individuals working in a variety of sectors. To analyze our data, we performed structural equation modeling.

#### **Results**

As expected, prevention focus mediated the relationship between job demands and exhaustion, whereas promotion focus mediated the relationship between job resources and

work engagement. Promotion and prevention focus also mediated crosspaths in the model. Additional regression analyses yielded little support for a moderating role of regulatory focus in the JD-R Model.

#### Limitations

Our study was cross-sectional and relied exclusively on self-report measures.

#### Research/Practical Implications

This study provides more insight into the role of regulatory focus in health–impairment and motivational processes in the workplace. The results may be useful for organizations that want to increase the well-being and motivation of their employees or want to help employees develop a specific regulatory focus.

#### Originality/Value

By applying regulatory focus theory to the Job Demands-Resources Model, we hope to create further synergy between regulatory focus theory and Work and Organizational Psychology.

### Resources at work in the effects of daily vitality levels

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#### Purpose

Vitality has been shown as an important clue for work functioning. Although lot of research has been directed to study vitality predictors, only few have been dedicated to daily vitality fluctuations. Based on conservation of resources theory (Hobfoll, 1998), we hypothesized that sleep hours, daily recovery and a servant leadership style enhance daily vitality

levels controlling for affect effects. Likewise, morning vitality is hypothesized that enhanced night vitality and mediate the effect of conservation of resources strategies on night vitality.

#### Design/Methodology

A diary study was conducted with workers (N=112) during five consecutive work days, three different moments of the day.

#### Results

Multilevel analyses conducted with MLwiN 2.11 supported that final day vitality is promoted by daily recovery ( $b=.127$ ,  $0.035$ ), servant leadership ( $b=.207$ ,  $0.056$ ), positive affect ( $b=0.176$ ,  $0.057$ ) and morning vitality ( $b=.253$ ,  $0.054$ ). Sleep hours is positive related to daily vitality ( $b=0.115$ ,  $0.031$ ), but not to night vitality ( $b=-0.008$ ,  $0.036$ ). Moreover, morning vitality partial mediate the effect of positive affect in night vitality ( $z=4.49$ ,  $p=.000$ ) and full mediate the impact of negative affect in night vitality ( $z=-3.33$ ,  $p=.000$ ).

#### Limitations

Experimental studies are still need to know the causal relationship of the variables in the energy day process.

#### Research/Practical Implications

These findings suggest that opportunities for controlling morning vitality are important to keep energy levels during the day.

#### Originality/Value

The study is focused on different daily vitality moments and their differential importance in resource maintenance.



### **Sleep quality and self-control capacity as protective resources in facing self-control demands: A diary study**

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#### **Purpose**

We sought to test whether sleep quality and self-control capacity jointly moderate (attenuate) intraindividual relations of daily self-control demands to strain and work engagement at the evening.

#### **Design/Methodology**

Our Hypotheses were tested on the basis of a diary study that was conducted over a course of 10 working days. The sample comprised 80 employees from the services sector. Each day, self-control demands (Neubach & Schmidt, 2007) and emotional dissonance (Zapf et al., 1999) as daily predictors were assessed at the noon, whereas need for recovery (de Croon et al., 2004) and engagement (Schaufeli et al., 2002) as criteria were measured at the evening. Sleep quality referred to the last night and was assessed using an adapted version of the PSQI (Buysse et al., 1989). Self-control capacity as a between-subject variable was operationalized through self- and partner-report (Tangney et al., 2004).

#### **Results**

Consistent with our Hypotheses, HLM-estimations (Raudenbush & Bryk, 2002) revealed that the intraindividual relations of work demands (noon) to need for recovery and engagement (evening) were attenuated as a function of sleep quality (last night). Moreover, we found a three-way interaction: the moderating effect of sleep quality was more pronounced, when self-control capacity was high.

#### **Limitations**

We operationalized all variables through questionnaire scales.

#### **Research/Practical Implications**

Our findings provide insight into the mechanism of recovery after resource depletion due to self-control demands and point to the relevance of focusing on sleep quality and self-control capacity as personal resources.

#### **Originality/Value**

We contribute to the clarification of how different resources interact to influence the relationship between self-control demands and strain experience.

### **Job resources may not promote work-related flow in high strain jobs**

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#### **Purpose**

Flow is an experience of enjoyment, intrinsic motivation and absorption, which can occur when challenges and skills are high. This study hypothesized that the likelihood to experience work-related flow increases in active jobs, when social capital and an innovative learning climate are high, and that there are interaction effects between these job resources and the four job strain categories.

#### **Design/Methodology**

A questionnaire was sent out to employees in 9 Swedish organizations. N = 3667 were returned (57%). Data was analyzed through logistic regressions.

#### **Results**

Active (OR 3.29, 95%CI 2.62-4.12) as well as low strain jobs (OR 3.15, 95%CI 2.53-3.91), social capital (OR 4.69, 95%CI 3.76-5.85) and innovative learning climate (OR 5.80, 95%CI 4.57-7.37) increase the likelihood to experi-

ence flow. Interaction effects between job resources and job strain category were found only in active and low strain jobs.

#### Limitations

This is a cross-sectional study and no conclusions of causality can be drawn.

#### Research/Practical Implications

Decision latitude appears to be a prerequisite enabling the benefit from additional job resources. Social capital and an innovative learning climate are job resources which also may constitute challenges. Passive and high strain jobs may hinder the benefit from job resources, and hinder work-related flow and employee well-being.

#### Originality/Value

Job resources reflecting features of the collective is scarcely investigated in relation to work-related flow. The present study expands the active-learning hypothesis by Karasek & Theorell. The results have importance organizational development work.

### **The interplay between job demands, job resources, and Type D personality in the prediction of job strain**

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#### Purpose

Job stress research suggests that there is a lack of converging evidence for the stress-buffering effect of job resources. One explanation for these mixed results is that workers' personal characteristics are likely to moderate the linkage between job conditions and job strain. In this study, we will introduce Type D ('distressed') personality (Denollet, 2005) as a possible moderator of the relation between job demands, job resources, and job strain. More specifically, it is proposed that Type D personality inhibits the use of job resources (Hypothesis 1) and that, as a result, the stress-

buffering effect of job resources is more likely to occur for workers low on Type D personality than for workers high on Type D personality (Hypothesis 2).

#### Design/Methodology

Both hypotheses were tested on a representative sample of the Dutch workforce (N=3392).

#### Results

Regression analyses supported Hypothesis 1. No support was found for Hypothesis 2.

#### Limitations

The current findings are based on cross-sectional data. Longitudinal data will be available soon and will be presented at the congress.

#### Research/Practical Implications

These preliminary findings suggest that employers who invest in job resources should be aware that workers are less likely to profit from these job resources if they have a distressed personality.

#### Originality/Value

To our knowledge, this is one of the first studies in the field of W&O psychology in which the role of Type D personality is examined. In addition, this is the first time (Type D) personality is examined in relation to the use of job resources.

### **Attachment predicting employees' performance: The mediating role of burnout**

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#### Purpose

Researchers are increasingly interested in how personal attributes influence behavior at work. Drawing on Bowlby's attachment theory, the present study addressed this topic by examining the relation between attachment in

adults and burnout and, in turn, burnout and performance.

#### Design/Methodology

Data were collected from 201 Dutch employees (51% women) who were working in different companies. The mean age of the respondents was 40.9 years ( $SD = 10.9$ ). Structural Equation Modeling (SEM) methods were used to test the hypotheses simultaneously. Bootstrapping techniques were used to examine the indirect effect of attachment on performance through burnout.

#### Results

The results revealed that attachment-related anxiety was positively related to burnout and that burnout was negatively related to performance. Burnout mediated the relation between attachment-related anxiety and performance. Attachment-related avoidance was not significantly associated with burnout and performance.

#### Limitations

The present study has limitations. It is based on cross-sectional, heterogeneous, and self-report data. It is desirable to replicate these results longitudinally and to use objective performance measures in future research.

#### Research/Practical Implications

The present study advances our knowledge about the possible antecedents of burnout and performance. In addition, attachment in adulthood as a personal attribute is relatively understudied in the field of occupational health psychology. The present study illustrates the applicability of the attachment theory in this field.

#### Originality/Value

To our knowledge, the present study is one of the first studies regarding the mediating role of burnout on the association between adult attachment and performance.

### Team conditions catalyzing burnout reactions: The role of team absenteeism

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#### Purpose

It is well-known that burnout is affected by work characteristics (e.g. time pressure), however little research investigated the role of team conditions that may accentuate or attenuate burnout reactions (Bliese & Jex, 2002).

The present study adopts a multilevel approach to explore the moderating role of team absenteeism in the relationship between time pressure and burnout.

Although absenteeism has been approached mainly as an individual phenomenon, it has been conceptualized also at the team level (e.g. Heywood, Jirjahn & Wei, 2008; Markham & McKee, 1995).

We hypothesized that team absenteeism, as a team condition, may catalyze the negative effect of time pressure on burnout.

#### Design/Methodology

5,407 call center operators, nested in 186 teams, completed burnout and time pressure measures. Team absenteeism was calculated using registered records of sickness absences during a period of 6 months.

We used Multilevel Structural Equation Modeling (ML-SEM) to disentangle the relationships among variables at the individual and team level, with random slopes representing cross-level interactions (Ludke, et al., 2008).

#### Results

The moderating role of team absenteeism was confirmed: the negative effect of time pressure on burnout was much stronger in teams where the level of absenteeism was high.

### Limitations

Self-reported measures were taken at the same point in time.

### Research/Practical Implications

Based on our results, the level of team absenteeism may help to identify teams at higher risk for burnout.

### Originality/Value

The main novelty of the study is to focus on absenteeism, not as a consequence of burnout reaction, but as a condition able to catalyze it.

## **Burnout and turnover intentions: The mediating role of negative work – Home interference. Results from a Romanian healthcare professionals sample**

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### Purpose

Over the last 20 years the Romanian healthcare system went through structural and legislative changes which added to the pressures of an already understaffed and underfinanced system. One major consequence is that many healthcare professionals choose to work abroad. Burnout is one factor that was frequently associated with turnover intentions (Leiter & Maslach, 2009). Although researches linked burnout with negative work-home interference (NWHI), few investigated NWHI' role in shaping turnover intentions. Our aim is to test the meditational role of burnout between NWHI and turnover intentions in healthcare professionals.

### Design/Methodology

Cross-sectional data were collected from a sample of 1190 physicians, residents and

nurses in three emergency hospitals. Participants filled out the MBI-General Survey, the Survey Work-Family Interaction Nijmegen, and a turnover intention index. All scales were found to have sound psychometric properties. SEM with Bootstrapping analysis was used to test the hypothesized model.

### Results

Results confirmed that NWHI partially mediated the relationship between burnout and turnover intentions and indicated a good fit of the data to the model ( $\chi^2(1)=6.348$ , CFI =.994, GFI =.997, AGFI =.958, RMSEA =.077).

### Limitations

The present research used a cross-sectional design.

### Research/Practical Implications

Our results have implications for designing interventions focused on reducing burnout and turnover intentions in Romanian healthcare professionals.

### Originality/Value

The migration of Romanian healthcare professionals to work abroad has become epidemic. Still, there is little data about the factors which shape their turnover intentions. Our research brings evidence about the role of both burnout and NWHI in the development of turnover intentions.

## **Relationship between overcommitment and burnout: Does job satisfaction play a role?**

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### Purpose

Using the COR (Conservation of Resources; Hobfoll, 1989) theory as a framework, we hypothesized that overcommitment plays a role in the burnout escalation process. We further specified our model by testing a mod-

eration effect of job satisfaction. Specifically, we propose a mediational moderated model in which burnout increases overcommitment, which in its turn leads to an escalation of burnout one month later. We further expected a buffering effect of job satisfaction in the link between overcommitment and burnout at time 2.

#### Design/Methodology

The study was conducted using a longitudinal (time lag: one month) design on all employees of the personnel department of the Autonomous Province of Trento in Italy (longitudinal response rate was 77,48%). To test our hypotheses we used the PROCESS macro (Hayes, 2012), computing a mediational moderated model.

#### Results

Analyses confirmed our hypotheses. Overcommitment increased burnout over time, and job satisfaction moderated the negative impact of this excessive work involvement on employees exhaustion.

#### Limitations

Our study is limited to a small sample of Italian workers employed in the public sector, so more research is necessary to extend our findings to other contexts.

#### Research/Practical Implications

The buffering effect of job satisfaction could represent a compensation effect, that could mask, but not eliminate, the influence of overcommitment on burnout, with possible detrimental effects in the long run. Future research should address this problem.

#### Originality/Value

To the best of our knowledge, this is the first study to empirically address the moderating effect of job satisfaction in the burnout escalation process.

### **Mobbing in the workplace – Individual, social and organisational consequences.**

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#### Purpose

It has been researched that workplace mobbing, being one of the most severe social stressor at work (Leymann's mobbing paradigm) has negative effect on employees' well-being and causes severe health consequences. The author has presumed that there is a correlation between experiencing mobbing and psycho-somatic symptoms and mobbing impedes employees' task fulfilment and efficiency at work.

#### Design/Methodology

Two studies were conducted on heterogeneous samples (2008: N= 465; 2010: N=260) of working population in Wrocław, with Polish SDM Questionnaire (Durniat, 2006), standardised, validated, built of 2 main scales: Scale of mobbing behaviours (43 items: 3 subscales – result of factor analysis,  $\alpha$  Cronbacha: 0.927, 0.932, 0.803) and Scale of victims' reactions (21 items)

#### Results

The results are indicative of a strong correlations between mobbing and negative mental and physical health consequences (3 scales/types: neurotic, depressive and psycho-somatic symptoms). Moreover, mobbing impairs employees' task fulfilment and efficiency at work.

#### Limitations

Researching mobbing in workplaces is difficult due to many methodological, psychological, social, organizational and legal reasons. The very nature of the phenomenon itself, which is mainly subjective, intangible, interactive, heterogenic and changing in time and socio-cultural context .

**Research/Practical Implications**

The results point out to the array of negative mobbing consequences on individual, social and organisational level. Thus, it is of great importance for the employee and employers, managers, lawyers, psychologists and doctors.

**Originality/Value**

This is the biggest, systematically study on mobbing consequences in Poland, also gives most detailed analyses on relations between specific mobbing categories and individual plus organisational consequences.

### **Effects of involvement with bullying in the workplace: Are the victims the only victims?**

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**Purpose**

Apart from victims other people can be involved and affected by bullying (Hoel et al., 2011). In this research we explored the effect of the level of 'involvement with bullying'. Based on personal experience of being bullied and witnessing the bullying taking place, we defined groups: 1. both being bullied and witnessing bullying; 2. being bullied; 3. only witnessing bullying, and 4. neither experiencing nor witnessing the bullying.

**Design/Methodology**

A sample of 1998 employees from various organizations in Serbia (53% women, all educational levels, all hierarchical levels), filled out the comprehensive survey (composed of: Negative Acts Questionnaire, Einarsen et al., 2009; Survey of Perceived Organizational Support, Eisenberger et al., 1986; Powerlessness of Counteract Threats and Perceived Threat to a Job - subscales from Job Insecurity Scale, Ashford et al., 1989; Satisfaction With Life

Scale, Diener et al., 1985, and items concerning workplace bullying and demographic data).

**Results**

One way ANOVA revealed significant differences between the four workplace bullying involvement groups in relation to powerlessness, perceived threat to the job, intention to leave, and satisfaction with life. In relation to powerlessness, intention to leave and life satisfaction, those that were not the victims, but witnessed bullying, expressed stronger negative effects than those neither witnessing, not experiencing bullying.

**Limitations**

Explored effects are not uniform across the four 'involvement with bullying' groups.

**Research/Practical Implications**

The effect of witnessing bullying should further be explored and taken into account in organizational interventions.

**Originality/Value**

The study calls attention to negative effects of witnessing workplace bullying.

### **Assessing the role of personality in the relationship between workplace bullying and psychological Well-Being**

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**Purpose**

Considering that some researchers have hypothesized that some personality traits and personal characteristics (e.g., narcissism, introversion) are crucial factors on the development of bullying situations at work, together with the lack of studies on this arena, the current study aims at exploring the role of personality traits in the relationship between workplace bullying and psychological well-being.



**Design/Methodology**

A cross-sectional survey study was conducted in Spain. Participants (n = 900) filled in a questionnaire designed to measure personality, workplace bullying and psychological well-being.

**Results**

Based on the Five Factors Model (FFM) of personality, results revealed that employees with higher scores on the dimensions neuroticism and openness are more likely to perceive themselves as victims of bullying. In addition, results from a Hierarchical Regression Analysis revealed: (a) a significant negative relationship between neuroticism and psychological well-being, and (b) a moderating role of openness on the relationship between exposure to negative acts (workplace bullying) and psychological well-being.

**Limitations and Research/Practical Implications**

Although interpreting our findings needs caution due to the cross-sectional nature of our data, this study has several implications for further research in this domain (e.g., including personality in further theoretical models) as well as for designing and implementing interventions to deal with workplace bullying (e.g., tailoring such measures considering personality traits).

**Originality/Value**

The present paper adds evidence concerning the discussed role of personality on bullying development, showing that the bullying victimization process and its impact on employees' health and well-being may be moderated by personality traits.

**A longitudinal study examining work-related rumination as a predictor of change in work-related fatigue over time**

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**Purpose**

The effort-recovery theory by Meijman & Mulder suggests that individuals unable to recover outside of work may experience adverse psychophysiological effects. Research suggests that rumination may extend work-related demands into non-work time resulting in increased fatigue. This longitudinal study assessed work-related rumination and work-related fatigue at two time points to test the following hypotheses: individuals reporting consistently high (Hyp 1) or low (Hyp 2) levels of rumination will report consistently high or low levels of fatigue over time; individuals reporting high levels of rumination at T1 and low levels of rumination at T2 will show a reduction in fatigue over time (Hyp 3); and individuals reporting low levels of rumination at T1 and high levels of rumination at T2 will show an increase in fatigue over time (Hyp 4).

**Design/Methodology**

A heterogeneous sample of 227 adult workers in diverse occupations completed an online survey at two time points, with follow-up at 6-10 months.

**Results**

Data were analysed using Analysis of Variance in SPSS version 19 (SPSS, 2009). The predicted hypotheses were supported ( $p < .001$ ).

**Limitations**

As the data was quasi-experimental it is possible that a third, uncontrolled variable may explain the relationship between rumination and fatigue.

**Research/Practical Implications**

In the context of extending work-related demands into non-work time this longitudinal study takes us a step closer to understanding the impact of work-related rumination as a causal factor of work-related fatigue.

**Originality/Value**

To the authors knowledge this is the first longitudinal study to consider the impact of work-related rumination in the causation of work-related fatigue.

**Religious and spiritual coping and adjustment to stressful working episodes**

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**Purpose**

Exposure to stress is one of the most widely studied risk factors for work-related diseases. Recent research, however, has begun to focus on resilience in the face of stress – why is it that certain individuals, even when exposed to tremendous amounts of stress, do not show any harmful responses? The findings in the field of religious coping are inconsistent: Several studies indicated that religious coping leads to less stress level while other research has found no such relationship. The current study builds on existing research in an important way. Hypotheses: In the face of stressful working episodes, religious coping will moderate the relationship between stress and psycho-physiological reactions.

**Design/Methodology**

To test these assumptions, data from 996 employees in the field of health care services were analysed regarding their religious beliefs, spiritual and religious coping and self-reported stress level.

**Results**

We found as expected a significant effect of stress level and coping such that individuals experiencing less stress show significantly higher religious and spiritual coping. (Multi-level analyses, SPSS).

**Limitations**

It remains to be tested how much our results generalize to other fields of work and which

confounding factors could have influenced the results.

**Research/Practical Implications**

To gain a better understanding about how religious coping styles are leading to protective effects. Understanding to what extent other coping strategies may be compatible with (rather than antithetical to) religious coping may inform future psychological health interventions

**Originality/Value**

To our knowledge, the study is one of the first to systematically analyze forms of religious and spiritual coping in the context of work-related stress.

**Temporal patterns of flow in working and non-working activities**

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**Purpose**

According to Csikzentmihalyi (1990), optimal experience emerges when information that keeps coming into awareness is congruent with goals; therefore, psychic energy flows. Work and non-work activities are two different contexts, which provide particular dynamics and origins of intrinsic motivation. Recent research has shown that the positive experience of flow has a volatile character that makes it hard to capture. In the present study, we explore temporal pattern of flow by using time series graphs.

**Design/Methodology**

Using the experience sampling method we collected near to 7000 registers from 60 workers. These workers answered a flow diary six times a day during 21 working days. The diary measured challenge, skills, enjoyment, interest and absorption.

### Results

Flow presents high fluctuations among workers except at midday. The main result show us the emergence of a sine pattern with peaks at noons and evenings/night and valleys at mornings and afternoons. Similarly, this sine pattern is repeated when we consider the week as the temporal frame: peaks in Tuesdays and Thursdays/Fridays, and valleys in Mondays and Wednesdays.

### Limitations

Enlarge the sample size would be desirable. Also it would be recommended to considered other temporal frames (e.g. seasons).

### Research/Practical Implications

These results lead us to new insights about the dynamic occurrence of flow experience at work and at leisure time. These dynamics has been rarely considered in previous studies and omitted in the professional field (e.g. HR practices).

### Originality/Value

Show at first time, as we know, the dynamic pattern of flow experiences.

## **Job performance adequacy - Consequences for well-being**

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### Purpose

A key question in job design theory is which work factors affect employee motivation, well-being, and job satisfaction. Established job design theories include factors relating to relational and organizational dimensions. However, job design theories do not adequately account for employees' perception of the intrinsic quality of the job performance itself. In particular, the effect of the employees' valuation of the quality of the service they are able to produce under the given organizational condition. In other words, we

proposition that employees' valuation of job performance adequacy affects well-being. Although related to feedback, the assessment of work performance adequacy is also based on the employees' professional and personal standards. The paper tests the hypothesis that employees' assessment of service quality adequacy impacts their well-being.

### Design/Methodology

We examined this hypothesis among 1745 unskilled and skilled preschool teachers in 94 public day care centers from the municipality of Copenhagen. The questionnaire was based on selected items from the Copenhagen Psychosocial Questionnaire.

### Results

Multilevel analyses with SAS supported the hypotheses.

### Limitations

Common source bias may be a problem and future research needs to address this issue. It also remains to be tested how much of the results generalize to other sectors and national contexts.

### Research/Practical Implications

These results indicate that an important motivating factor for employees is their experience of quality in the job, they perform. This leads us to argue that a new dimension called 'opportunities for job performance quality' should be added to job design theory.

### Originality/Value

No other job design theories adequately consider opportunities for job performance quality as an independent variable affecting well-being.

## **Psychological health: A prerequisite for having motivated employees?**

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#### Purpose

Organizations dedicate considerable efforts to boost employee motivation, but rarely focus on psychological health as a prerequisite for their full involvement. Based on the bidimensional theory of psychological health (Keyes, 2003, 2005, Massé et al., 1998) and the self-determination theory of motivation (Deci & Ryan, 1985, 2000), this study aimed to test the differential effects of two facets of psychological health at work, namely psychological distress and well-being, on controlled and autonomous forms of workplace motivation.

#### Design/Methodology

A sample of 466 Quebec workers completed measures of psychological distress, well-being, and motivation at work at two times separated by a 6-month interval. Hierarchical multiple regressions were performed, and will be followed by structural equation modelling analyses.

#### Results

After controlling for social desirability ( $\beta = .15$ ,  $R^2 = .02$ ), indicators of psychological distress and well-being at Time 1 were related to autonomous motivation at work at Time 2 ( $-.45 \leq \beta \leq .36$ ;  $\Delta R^2 = .47$ ;  $F(8,209) = 25.24$ ,  $p < .001$ ). However, these psychological health indicators failed to predict controlled motivation six months later ( $F(8,209) = 1.86$ ,  $p > .05$ ).

#### Limitations

Although social desirability was controlled and a temporal separation was implemented (Podsakoff et al., 2003), self-reported data are subject to common method biases.

#### Research/Practical Implications

Employees' psychological health is an important vector of self-determined motivation in the workplace, but does not appear as a key determinant of controlled motivation.

#### Originality/Value

Using a comprehensive theoretical framework, this study lead to a more precise understanding of how psychological health and well-being interact with motivation at work.

### **A dynamic perspective on self-control: Daily exercise, momentary fatigue and momentary self-control**

#### **Nominee of the EAWOP Congress 2013 Best Paper Award**

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#### Purpose

Self-control is crucial for successful task performance. However, how self-control fluctuates and what factors help to replenish self-control is not well-studied. Drawing on the ego depletion literature and the strength model of self-control, we put forward and examined a dynamic model on momentary self-control.

We hypothesize that momentary fatigue is negatively related to momentary self-control. Within a day, momentary self-control decreases and momentary fatigue increases with time. We also hypothesize that daily exercise is a promoter of self-control on the following day, through reduced level of momentary fatigue on the following day.

#### Design/Methodology

A combination of cross-sectional survey, a real time experience sampling method and a morning diary was employed. We tracked momentary fatigue and self-control using mobile phone four times a day for 7 days. We measured daily exercise in a morning diary. In

total, 67 nurses provided 452 diaries and 1689 momentary observations.

#### Results

We conducted a set of latent growth models and hierarchical linear models to test the hypotheses. All hypotheses were supported. Supplementary analyses showed that the negative effects of momentary fatigue on momentary self-control will be weaker if doing exercise on the prior day.

#### Limitations

Despite variables were collected from different kinds of surveys, they were self-reported.

#### Research/Practical Implications

The study provides evidence on the dynamic nature of self-control and daily exercise as a useful way to improve self-control.

#### Originality/Value

This study takes initiative to track employees' momentary self-control using mobile phone. Our results revealed the change pattern of self-control within a day and the underlying process through which daily exercise influences momentary self-control.

### **The impact of daily motivational and health-impairment processes on job crafting behaviour: Evidence from a lean manufacturing context**

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#### Purpose and Originality

As a proactive behaviour, job crafting has gained particular relevance to the study of changing workplaces. Using the Job Demands-Resources framework (JD-R; Demerouti et al., 2001) and based on previous research (Petrouti et al., 2012; Tims et al., 2012) we operationalized three dimensions of job crafting at gen-

eral and day level; seeking resources, seeking challenges and reducing demands. We hypothesised that in the context of lean manufacturing, which is characterised by continuous change; (a) active jobs (i.e. jobs with high resources and challenge) facilitate daily engagement, resource seeking and challenge seeking behaviour, and (b) jobs characterised by hindrance demands and low resources facilitate exhaustion and demands reducing behaviour. This is the first study to our knowledge which considers the role of job crafting dimensions in both motivational and health-impairment processes of the JD-R model.

#### Design/Methodology

Hypotheses were tested with employees from a large pharmaceutical manufacturer utilizing lean practices on a daily basis. Participants were asked to complete a general survey, and 4 daily surveys (N=64).

#### Results

Preliminary findings demonstrate that within the JD-R model, job crafting is an important contributor to the motivational process yet has little or no impact on the health-impairment process. Further multilevel analysis will examine the interaction between daily resources and demands in predicting daily engagement and dimensions of crafting behaviour.

#### Research/Practical Implications

These findings provide further support for the inclusion of job crafting and its specific dimensions as an important addition to the JD-R model in explaining how employees actively shape their jobs and promote personal well-being.

### **Day-level fluctuations in stress and engagement in response to day-level workplace incivility: A diary study**



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#### Purpose

This paper extends incivility research by using a diary design to consider the effect of experiences of incivility at work on within-person, day-level outcome variables, namely, stress and work engagement. We also investigate whether between-person factors moderate the relationship between incivility and negative outcomes at the within-person level. The moderators considered are perceived supervisor support (job resource) and core self-evaluation (personal resource).

#### Design/Methodology

The hypotheses operate across two levels. Survey data were collected from 130 security employees eight times over a four week period and analysed with multilevel modelling.

#### Results

Supporting the hypotheses, this research found a significant relationship between daily incivility and daily outcomes. Participants had higher stress on days they experienced more incivility but high supervisor support reduced this effect. However, a negative relationship between incivility and daily engagement was only significant for those with low core self-evaluation.

#### Limitations

Self-reports raise concerns about common method variance, although using person-centred scores in the within-person analyses eliminated the potential influence of individual differences. Many employees in our sample did shift work, so our results should be replicated with employees from different industries working more regular hours.

#### Research/Practical Implications

The results have important implications for interventions aimed at reducing the damaging effects of workplace incivility, e.g., supervisors

appear to play a pivotal role in minimising the negative impact of incivility and, consequently, of strain on employees.

#### Originality/Value

To date, studies of incivility – as with much of the interpersonal mistreatment literature – have been almost exclusively at a single level of analysis, examining the broader outcomes of incivility at the between-person level.

### Explaining day-level effects of time pressure through its primary appraisal

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#### Purpose

In the challenge-hindrance approach (e.g., LePine, Podsakoff, & LePine, 2005), stressors have been classified into hindrance stressors (e.g., role ambiguity) and challenge stressors (e.g., time pressure, workload) based on *a priori* assumptions. Recently, Webster, Beehr, and Love (2011) have pointed out that employee's primary appraisal of stressors as challenging or hindering should be examined directly. They showed that the general effect of workload on emotional exhaustion is partially mediated through its appraisal as a hindrance. Following Webster et al. (2011) the present study aims to investigate whether the day-level effects of time pressure on emotional exhaustion and vigour are mediated through its primary appraisal.

#### Design/Methodology

A diary study was conducted with 62 office workers (32 female; mean age=35.6, *SD*=9.95) each providing data over at least three working days. In total 219 working days were analysed using multi-level mediation analyses.



### Results

The effect of time pressure on emotional exhaustion was partially mediated through its primary appraisal (Sobel's  $t = 2.91$ ,  $p < .01$ ), whereas the effect of time pressure on vigour was fully mediated (Sobel's  $t = 2.73$ ,  $p < .01$ ).

### Limitations

As the results of this study could be affected by common method variance future diary studies should strive to obtain multiple sources to measure stressors, their primary appraisals, and strain.

### Research/Practical Implications

The results emphasize the importance of obtaining information about the appraisal of stressors as challenge or hindrance in order to better understand their effects on strain.

### Originality/Value

This study extends previous research by investigating effects of primary appraisal on strain on the day level.

## **Work outcomes' interpretations influence on motivation: The mediating role of affect in a daily study**

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### Purpose

Work outcomes are crucial to work motivation. More specifically, the interpretations of these outcomes will influence the affective experience of employees. Likewise, the interpretation of these outcomes in terms of success or failure, and their importance, generate emotional reactions that influence on motivation.

### Design/Methodology

We studied these relations using a longitudinal design. 111 workers with different positions, belonging to different organizations and

sectors, answered a daily questionnaire for ten days ( $N = 1131$  observations). The diary contained questions to assess work outcomes (success-failure and importance), affect (positive and negative affect) and motivation (i.e. state work engagement). Multilevel mediation analysis was used.

### Results

Results support a relationship between work outcomes and motivation mediated by affective reactions. Significant indirect effect of positive affect ( $R = .25$ ,  $p < .001$ ) and of negative affect ( $R = .13$ ,  $p < .001$ ) was found.

### Limitations

Enlarging the sample should be desirable for the future. Similarly, adding elements from attributional theory (e.g. locus of control about outcomes and their stability) should provide new insights about the relations explored.

### Research/Practical Implications

The causal chain explored here provides new theoretical elements to be included in previous models that have been interested in learning about main variables influencing motivation (i.e., state work engagement). From a practical perspective, the study suggests to paying attention to the emotional states that work generates. This insights can help managing emotional reactions and promote well-being and efficacy in organizations. The importance of considering the volatility of the emotional dynamics is also emphasized.

### Originality/Value

Show the importance of proximal antecedents (i.e. affect) in work motivation at daily level.

## **Work characteristics, job satisfaction and wellbeing. A study based on eurofound data**

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#### Purpose

Different models of wellbeing have shown that work characteristics have an impact on job satisfaction and wellbeing (e.g, Hackman & Oldham, 1980). The strong transformations in the nature of work and the workforce boost further research to understand the relationship of prevailing work characteristics with wellbeing, the mechanisms through which this process occur and the potential differences for workers of different age groups.

The objective of the study is to explore (1) the mediational role of meaningfulness of work in the relationship between work characteristics and wellbeing; and (2) the role of age in this relationship.

#### Design/Methodology

Data from 43,816 workers were obtained from the 5th European Working Conditions Survey (2010). We considered four types of work characteristics: HPWO, autonomy, work intensity and emotional work. Meaningfulness of work was considered as mediator and job satisfaction and wellbeing as outcomes.

#### Results

Structural equation analysis shows (1) better adjustment for the model showing a partial mediation of meaningfulness of work between work characteristics and outcomes; (2) and no differences between age groups.

#### Limitations

Other significant work characteristics and potential mediators were not considered in this study.

#### Research/Practical Implications

This study advances the knowledge about the mechanisms linking work characteristics and wellbeing. It also offers practical implications for job design, stressing the validity of the model for workers in different age groups.

#### Originality/Value

The consideration of age, the examination of mediating mechanisms and testing the model in a big sample of workers from all European countries contributes to the value of this study.

### **Job features, worker satisfaction and engagement: Moderation by affective power**

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#### Purpose

Associations between job features and wellbeing are thought to be moderated by worker preferences, but that assumption is invalidated by the widespread failure of empirical studies to observe that pattern. This paper draws on Mischel's influential social-relations model of "situational strength" to propose and test a contingency variable in terms of the affective power of a job feature.

#### Design/Methodology

In three studies (N = 840, 1038 and 4217) the same 33 job features were examined in relation to job satisfaction and engagement. For each feature, respondents rated the desired amount in an ideal job and the actual perceived amount in their current job. Situational strength was operationalised by the evaluative extremity of a feature, using the sample mean of preference ratings.

#### Results

Relationships between job features and both forms of well-being tended to be stronger when features were valued more by workers, but (as predicted) interactions were not consistently found across all features. In all three studies, statistical moderation was significantly greater when features were less extremely evaluated; situational strength in terms of affective power was consistently a significant contingency variable.

### Limitations

Studies were based on cross-sectional data. As the hypothesis is not causal, however, this is acceptable.

### Research/Practical Implications

Person-situation interaction" does not always involve a statistical interaction between job features and worker preferences, and the occurrence of that interaction depends on a feature's affective power. Models of job design and of worker motivation need to incorporate the predictably varying influence of individual preferences.

### Originality/Value

This project offers a theoretical explanation for previously-reported inconsistent findings about person-situation interactions.

## **A preliminary study investigating the relationship between job satisfaction, work engagement, emotional dissonance, and wellbeing**

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### Purpose

This study attempted to investigate the relationship between Job Satisfaction (JS), Work Engagement, Emotional Dissonance (ED), and Well-being.

### Design/Methodology

The participants (N= 60) work in a telecommunication organisation based in the Middle East, and are part of a talent pool. They were administered a questionnaire consisting of measures on ED, Employee Engagement (UWES), Decision Making (DM), JS, Physical Symptoms (PS), and GHQ. This is a baseline for an ongoing longitudinal study.

### Results

The average age of the participants was 35 years, with 90% male, and 73% came from Collectivistic cultures. Fifty eight percent of

the participants were with the organisation between 4-5 years. Preliminary results indicate participants reported quite a lot of DM ( $x = 3.98$ ,  $Std = 1.00$ ), were very often Engaged ( $x = 4.94$ ,  $Std = 0.59$ ). This group also reported moderate JS ( $x = 5.04$ ,  $Std = 1.04$ ), and rarely experienced ED ( $x = 2.36$ ,  $Std = 0.95$ ). No significant difference was observed between the variables. Through regression analysis, a relationship was found with JS and low GHQ. Also it was observed that there was a relationship with Engagement, low ED, high JS and low GHQ.

### Limitations

The main limitation is the small sample size, even though there was 100% participation rate. It is expected that as the talent pool group grows, the larger the participants.

### Research/Practical Implications

A practical implication of this research is to understand whether talent pool members who have high engagement experience psychological symptoms over time.

### Originality/Value

At present, there is limited research in this area, especially when examining the effect of high engagement on employees in the long term.

## **Changes in skill variety predict job satisfaction and psychosomatic complaints**

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### Purpose

Skill variety in terms of opportunities for utilizing different skills is an important element of job design; it is associated with well-being and health, but most pertinent research is cross-sectional. Positive associations with well-being, and with intellectual flexibility, have been shown longitudinally, but these studies

focus on levels of skill variety at time 1 and do not use *changes* in skill variety as a predictor. We expect changes in skill variety to be associated with well-being in terms of higher job satisfaction and fewer psychosomatic complaints.

#### Design/Methodology

Skill variety, job satisfaction, and psychosomatic complaints were assessed in 2005, 2006, 2007, and 2010 (N = 317 young employees). Data were analyzed using latent growth modeling.

#### Results

Skill variety decreased over the first three years after labor market entry. Initial levels of skill variety predicted higher job satisfaction in 2010. Steeper decreases in skill variety from 2005 to 2007 predicted lower levels of job satisfaction and more psychosomatic complaints three years later.

#### Limitations

This longitudinal study used only self-report.

#### Research/Practical Implications

Our results extend the often found association between challenging work content and job satisfaction in terms of a) showing it for young employees, b) longitudinally, c) not only for initial level but also for changes, and d) for psychosomatic complaints; they underscore the importance of maintaining a high level of challenging work content beyond the initial phase by enriching work as routine increases.

#### Originality/Value

Compared to the few existing longitudinal studies, we focus on changes and their relations with well-being.

### **Autocratic leadership and professional self-efficacy: The underlying mediators and moderating personality characteristics**

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#### Purpose

Reduced professional self-efficacy can lead to major occupational health problems, including burnout. Therefore, identifying its antecedents is important. Autocratic leadership seems a critical determinant of subordinates' professional self-efficacy. Yet, findings on the link are inconclusive. In line with the 'Job Demand-Control-Support' model (Karasek & Theorell, 1990), we argue that autocratic leadership is negatively related to professional self-efficacy, because autocratic leaders are demanding, followers perceive low social support and feel reduced job control. However, we also expect autocratic leadership to be positively related to professional self-efficacy, because autocratic leaders provide followers with a sense of job clarity. Furthermore, we investigate the moderating influence of follower's personality characteristics need for control, cognitive closure, and agreeableness on these relationships. Following up on this research, we propose a study focusing on antecedents of leaders' reduced professional self-efficacy and work-engagement, which do not only affect followers, but the organization as a whole.

#### Design/Methodology

We tested our assumptions in a sample of 116 dyads (N=232) of colleagues working under the same supervisor.

#### Results

Regression and multilevel analyses partially supported a moderated mediation model.

#### Limitations

Though self-reports are appropriate for measuring affective states and personality, single source bias can play a role. Therefore, our sample consisted of follower dyads.

**Research/Practical Implications**

Considering the negative consequences and high costs of reduced professional self-efficacy as the first step of burnout for the individual, organization, and society, this is an important research field.

**Originality/Value**

The present study extends previous research by showing that interactive effects of underlying antecedents and follower personality characteristics help explain different levels of professional self-efficacy.

### **Do you see me stressed or am I stressed? Work-related stress among Italian leaders and employees**

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**Purpose**

Since work-related stress is becoming a significant problem in Italy, theoretical and methodological improvements are needed in order to detect such phenomenon at work. Thus, the aim of this paper is to introduce a new method for evaluating stress at work by comparing self-report measures of stress from the employees and their leaders' evaluation of the stress of their subordinates. In addition, a positive impression scale was added in order to verify whether workers might give socially desirable responding in organizational diagnosis.

**Design/Methodology**

A survey study was conducted, in which participated above 1100 employees and 200 leaders within several Italian organizations. Structural equation modeling was used.

**Results**

A model of stress at work that incorporates relationships among organizational (workplace bullying) and individual factors (positive impression and health) reported a good fit. Fur-

thermore, results showed that the leaders' capacity of understanding subordinates' stress is associated with subordinates' mental health since higher disagreement between self and leaders' ratings was related to lower health.

**Limitations**

Future longitudinal studies are needed to fully understand the relationship between divergence in stress ratings and mental health.

**Research/Practical Implications**

Implications for developing healthy organizations through healthy leadership are discussed.

**Originality/Value**

To our knowledge, the study is the first to analyze socially desirable responding in organizational stress diagnosis.

### **Goal setting and employee well-being: A different perspective on a widely applied leadership instrument**

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**Purpose**

The beneficial impact of goal setting on productivity and performance is very well documented. The implications for employee well-being are far less researched. The purpose of our study was to analyze the relevance of goal setting for employee well-being, test it as a mediating mechanism for the relationship of transformational leadership and employee well-being and identify the role of trust in the supervisor as a potentially moderating variable in this process.

**Design/Methodology**

Questionnaires were administered online to employees (N= 261) from various branches and organizations. We included strain as a negative indicator and work engagement as a positive indicator of employee well-being.

Survey data were analyzed using multiple regression, mediation and moderation analysis.

#### Results

Overall, whether or not goal setting procedures were applied was unrelated to strain levels but positively related to work engagement. Second, various specific goal setting aspects, such as goal clarity or participation, showed significant, yet diverging relationships with the two aspects of employee well-being. Third, these goal setting aspects mediated most of the relationships between transformational leadership and employee well-being. Finally, trust in the leader moderated the majority of relationships analyzed.

#### Limitations

Data is self-reported and cross-sectional.

#### Research/Practical Implications

Our study revealed that goal setting practices increased work engagement but showed a relatively complex pattern of relations to employee strain. Hence, future research on goal setting should not only target performance, but also take into account its implications for employee well-being.

#### Originality/Value

The study illuminates previously mostly neglected possible side effects of goal setting.

### **Resonant leadership and workplace empowerment: The value of positive organizational cultures in reducing workplace incivility**

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#### Purpose

High personal and organizational cost of workplace incivility must be addressed to promote retention of nurses and to sustain effective health care organizations. The pur-

pose of this study was to examine the influence of resonant leadership and workplace empowerment on nurses' experiences of workplace incivility and burnout and ultimately job satisfaction in Canadian nursing settings.

#### Design/Methodology

The analysis reported here is part of a larger national study of nurses' worklife. Participants received a survey using the Dillman Total Design Methodology to increase return rates. From a total sample of 3,600 nurses from nine participating provinces (400 per province), 1,241 useable questionnaires were returned (35% return rate). Data were collected from September 2010 to January 2011.

#### Results

Results showed that resonant leadership had both a direct influence on job satisfaction as well as an indirect effect through creating a greater sense of workplace empowerment and subsequently lower coworker incivility and burnout.

#### Limitations

The cross-sectional design precludes our ability to attribute strong causal effects and the use of self-report measures raises concerns about common method variance.

#### Research/Practical Implications

This study highlights the importance of leadership in creating healthy work environments. Results demonstrate the importance of positive work environments in mitigating negative nursing outcomes and thus the indispensable role of strong positive leaders in ensuring these conditions are in place.

#### Originality/Value

This study is the first to demonstrate the role of resonant leadership behaviours in nursing leaders and their influence on the nursing work environment and resulting nursing outcomes.



## Linking participative leadership behaviour to employee well-being – The role of affective trust in the supervisor

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### Purpose

Traditionally, leadership research has predominantly focused on how leaders influence the motivation and performance of followers. However, relatively few studies have examined the impact of leader behaviours on followers' health and well-being. The present study attempts to fill this void by exploring the effects of participative leadership behaviour on two indicators of employee well-being: work engagement and emotional exhaustion. Additionally, this research sought to examine the mediating role of affective trust in the supervisor in these relationships.

### Design/Methodology

Data for this longitudinal study were collected from 216 Irish trainee accountants drawn from a variety of organizations. Structural equation modelling was used to test the research hypotheses.

### Results

Results revealed that affective trust in the supervisor fully mediated the link between participative leadership behaviour and emotional exhaustion, while it partially mediated the effects of participative leadership behaviour on work engagement.

### Limitations

This study used a sample of Irish trainee accountants, which may restrict the generalizability of the results to other occupations.

### Research/Practical Implications

Our findings suggest that participative leadership behaviour is likely to play a critical role in improving employees' work-related health and well-being. Thus, by using appropriate

interventions, organizations should encourage managers and supervisors to adopt a participative leadership style.

### Originality/Value

This is the first study that has linked participative leadership behaviour to employee well-being. Additionally, it highlights one potential mechanism in the form of affective trust in the supervisor through which participative leadership can influence work engagement and emotional exhaustion.

## Posters

### Workplace bullying as a predictor of mental health problems in nurses

#### ***Nominated for the EAWOP Congress 2013 Best Poster Award***

Iselin Reknes (Univ. of Bergen, NO)

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### Purpose

According to the Cognitive Activation Theory of Stress, repeated cognitive activation (worrying), for example in relation to workplace bullying, may prolong physiological activation in the target, leading to impaired health. The relationship between workplace bullying and mental health has mainly been explored in cross-sectional studies, without the possibility to infer causality. Using a prospective design, the aim of this study was to explore the longitudinal relationship between workplace bullying and symptoms of anxiety, depression and fatigue.

**Design/Methodology**

Data were gathered in 2008-2010 with a time-lag of approximately one year for all respondents. 1582 Norwegian nurses participated at both T1 and T2. All hypotheses were tested using hierarchical regression analyses, adjusting for the dependent variable at T1, age, gender, night work and work demands.

**Results**

The results show that baseline exposure to bullying behaviors predicted both symptoms of anxiety ( $\beta = .04$   $p < .05$ ) and fatigue ( $\beta = .05$   $p < .05$ ) at T2. In addition, baseline symptoms of anxiety ( $\beta = .10$   $p < .01$ ), depression ( $\beta = .12$   $p < .01$ ) and fatigue ( $\beta = .09$   $p < .01$ ) predicted exposure to bullying behaviors at T2.

**Limitations**

The short time-lag used in this study may be the cause of a non-significant relationship between exposure to bullying behaviors and subsequent symptoms of depression. Future analyses with longer time-lags are therefore needed to conclude further.

**Research/Practical Implications**

Altogether, the results show that organizations must give high priority to prevention and management of bullying at work.

**Originality/Value**

This study indicates a reciprocal relationship between workplace bullying and health, thus supporting the idea of a vicious circle between the variables.

### **The effectiveness of occupational health management – findings of a VBG practice-based project**

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**Purpose**

As the working world becomes more oriented towards service and competition, it is increasingly causing new forms of work-related stress and demands to be placed on employees. Studies have shown an increase in psychological stress at work.

It is becoming more important for companies to avoid the continual overworking of their staff and to actively invest in improving their employees' health awareness. VBG supports its member companies with an occupational health management advisory service.

**Design/Methodology**

The evaluation of a project to introduce occupational health management in a company from the insurance sector is presented. Data was collected by means of an online survey ( $N = 629$ ) conducted prior to and after measures were implemented. The survey comprises a number of different constructs relating to the fields of 'stressors' (e.g. excessive demands, stressful social climate), 'resources' (e.g. social support) and 'well-being' (e.g. psychosomatic problems). Specific change hypotheses were put forward and examined on the basis of the measures implemented.

**Results**

Overall, the results indicate an improvement in the stress situation within the company. Excessive demands, in particular, were reduced. The hypotheses put forward in relation to the individual measures were, to a large extent, corroborated, and prove that the occupational health management project was a success.

**Limitations**

It would be wise to conduct follow-up data collection in order to examine the long-term effects.

### Research/Practical Implications

In addition to the quantitative findings, results show the conditions that are the necessary prerequisites for successfully implementing occupational health management.

### Originality/Value

The findings presented demonstrate the benefits of occupational health management in practice.

### Individual and Team Resilience

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### State of the Art

Resilience is a topic that is currently receiving a great deal of interest among those responsible for performance and wellbeing in organisation, as the work environment becomes increasingly challenging and uncertain. However, it is often the case that organisations look at developing resilience at one particular level and overlook the connection between employees, teams and the wider organisation. This position paper offers a multi-dimensional contribution by addressing the question of resilience from the individual and team perspective, including observations on how these two levels of resilience interact with each other to affect the wider organisation. Beginning with a focus on the individual perspective, the presentation moves on to look at the individual + team and will then touch upon how individual + team resilience can benefit the organisation as a whole.

We report on recent research and practice that uses a variety of methods and approaches to explore the theme of resilience at different levels within the organization. We review some of the relationships between resilience and wellbeing, and the implications for resilience-building activities in the organisational context.

Within the research literature, there has been a shift from a narrow focus on resilience as bouncing back from setbacks or avoiding stress, to a broader recognition of how resilience is displayed in the way individuals manages situations on a day-to-day basis. In addition, many now define resilience as a multi-dimensional set of processes and outcomes, rather than a specific cluster of traits. The implication is that resilience can be developed, and in order to understand and develop resilience in the work context you have to engage with what people are actually doing and experiencing during the course of their working day. There is good evidence to show how building resilience benefits both individual well-being and organisational performance.

### New Perspective/Contribution

At an individual level we offer our own perspective to understanding personal resilience. We consider the attitudinal components of personal resilience, which focus on how people think and behave under pressure. We then describe the important “resilient resources”, based around four key personality traits and abilities. Connections can then be made between a person’s long-term capability (the four trait and ability based “resilience resources”) and his or her current attitudes (the state based “resilient attitudes”).

At the team level we set out a new framework for building strong teams by incorporating predictors of individual and team resilience into the selection process. We discuss the assessment of individual resilience and explain the concept and relevance of “team resilience”. With reference to an organisational case study, we demonstrate how the situational judgement method can be applied in selecting people for roles that often test both individual and team resilience to the limit.

The later part of the presentation will focus on what can be learned from those organizations who are leading the way by addressing resili-

ence-building directly, within the wider context of leadership development, organisational transformation and performance enhancement.

#### Conclusion and Implications for Research/Practice

Interventions and approaches described during presentation will have important practical implications on a number of levels. We will provide scientific evidence that support the benefits of these approaches for employee well-being, engagement and measurable business outcomes. We will also illustrate how these outcomes can be achieved within the context of wider programmes of organisational transformation and leadership development.

The approach to individual resilience discussed during the presentation includes the “state” and “trait” based elements of resilience and has been applied with a variety of organisations. However, the central implication for developing individual resilience around this framework is to understand the differences between the experiences of the individual when under pressure.

The second part of the presentation introduces the benefits of predicting a candidate’s likely impact on “team resilience”, and a new framework and approach for assessing both individual and team resilience. These are important requirements in the context of certain challenging work environments. They are, however, also relevant to many other contexts and roles, as can be seen from a detailed analysis of the behavioural indicators of well-researched competency frameworks.

The final implication at an organisational level is to explain why organisations should be incorporating resilience-building into their wider programmes and initiatives. This takes resilience-building far beyond its traditional place within the confines of one-day workshops and

other short, one-off training interventions. We demonstrate clearly the shift from a “remedial” approach to one of “comprehensive psychological fitness for all”, whereby organisations treat resilience as a normal process and outcome for which individuals need to take personal responsibility, but which can be supported in a wide variety of ways by their employers.

#### **Opportunities for professional development: A mediational effect within the job demands-resources model**

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##### Purpose

Opportunities for professional development (OPD) can be considered an organizational resource able to reduce stress and increase workers’ motivation (Panari et al., 2010). Since little is yet known about the process of professional development (Elman et al., 2005), the present study aims at investigating the mediational role of OPD between job resources and disengagement within the job demands-resources model (Bakker & Demerouti, 2007).

##### Design/Methodology

The study involved 356 Italian employees. The self-report questionnaire measured workload, emotional dissonance, customer related social stressors, colleague support, supervisory coaching, job autonomy, OPD, exhaustion and disengagement. Data analysis was conducted using PASW 18 and Mplus 6 (Muthén & Muthén, 1998-2007).

##### Results

The SEM analysis (Model fit:  $\chi^2 (44) = 122.22$ ;  $p < .01$ ; RMSEA = .07; CFI = .95; TLI = .92; SRMR = .06) confirmed a positive relationship of job demands with exhaustion and a negative relationship of job resources with exhaustion. Moreover, results showed a total media-

tional effect of OPD between job resources and disengagement.

#### Limitations

The study has some limitations, due to its cross-sectional design and self-reports data; further longitudinal research or diary-study are required. Moreover, future research should be better operationalized the OPD construct to appreciate its comprehension.

#### Research/Practical Implications

In conclusion, organizations should give all employees the same OPD, foster a culture of development and learning and also pay close attention to the supervisors' role in offering OPD.

#### Originality/Value

This study adds to knowledge of OPD highlighting their relevant role in decreasing cynicism toward work and in enhancing the effect of other job resources on work engagement.

### **Testing a causal model of job insecurity and job satisfaction: Do dispositions matter?**

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#### Purpose

Job insecurity has emerged as a prolific stressor in modern working life. While previous research has linked job insecurity to diminished job satisfaction, scholars rarely examine the role of personality dispositions and have yet to establish the strength and direction of causation. To address these gaps, the present research develops and tests a causal model describing the influence of positive and negative affect (PA/NA) on the relationship between job insecurity and job satisfaction.

#### Design/Methodology

Three waves of longitudinal panel data (n = 258) were collected from a large media com-

pany undergoing restructuring and analyzed using structural equations modeling.

#### Results

While NA had no impact on job insecurity or job satisfaction, PA at Time 1 provided a protective buffer against job insecurity and increased intrinsic job satisfaction at Time 3 through greater satisfaction with pay and promotions at Time 2. Additionally, job changes insecurity at Time 1 was a causal precursor to job loss and marginalization insecurity at Time 2.

#### Limitations

Sample comparisons suggest that the findings may have been influenced by self-selection biases. The generalization of results to other organizations awaits further empirical examination.

#### Research/Practical Implications

The present model highlights the importance of human resource management initiatives aimed at enhancing PA and extrinsic job satisfaction to protect workers against job insecurity and enhance intrinsic job satisfaction.

#### Originality/Value

The causal model can be used with confidence to understand the relationship between job insecurity and job satisfaction over time and the pivotal role of PA in shaping this relationship.

### **The paradox of work reconsidered: A systematic test based on the day reconstruction method**

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#### Purpose

In a frequently cited contribution, Csikszentmihalyi and LeFevre (1989) introduced the „paradox of work“. This term refers to the fact that participants had more flow-experiences

at work than in leisure, but reported less intrinsic motivation when at work than during leisure time. We demonstrate that this paradoxical result may reflect a methodological artifact as the specific operationalization of flow applied in the study is problematic.

#### Design/Methodology

Using the Day Reconstruction Method in two studies with employed participants ( $N_1 = 103$ ,  $N_2 = 106$ ), we conducted a comprehensive analysis of employed individuals' flow-experiences and their motivational state during work and leisure episodes.

#### Results

Our respondents reported significantly higher levels of positive affect, intrinsic motivation, and more instances of an optimal skills-demands-fit during leisure episodes compared to working episodes. In one of our studies participants also reported significantly higher levels of flow-experiences during leisure episodes compared to working episodes. Contrary to the proposed paradox of work, we did not find any evidence reflecting higher levels of positive feelings or flow-experiences during work compared to leisure times.

#### Limitations

However, self-report measurements of flow-experiences may be biased by individuals' beliefs about how they should feel when performing specific activities.

#### Research/Practical Implications

By comparing different measures of flow-experiences, we demonstrate that flow researchers should rely on direct measures of this highly specific state of consciousness instead of only assessing preconditions of the experience, which is common practice.

#### Originality/Value

To our knowledge, our studies are the first ones that question the paradox of work.

### **Apprentices' job insecurity within three European countries**

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#### Purpose

Whereas there are various studies investigating job insecurity on job holders with long tenure, only a few look at job insecurity among young adults being still in apprenticeship. Our study focuses on job insecurity's antecedents comparing samples of commercial apprentices in three European countries (Germany, the Netherlands, Spain) that differed respective to the extent to which employers were engaged in the training process.

#### Design/Methodology

Data collections took place at vocational schools in 2011 ( $n=299$ ), measuring job insecurity with an instrument from Seppelfricke and Staufenbiel.

#### Results

Confirmatory factor analysis revealed cross-nationally the best fit for a two-factor model disjoining a cognitive and an affective component of job insecurity. Despite the substantial differences with regard to the underlying vocational systems, we found similar prediction patterns within the three countries. Employability proved to be the best predictor of cognitive JI, followed by occupational self-efficacy. Geographic mobility came out to be more important for predicting affective than cognitive JI.

#### Limitations

The generalizability of our results might be limited by having considered only apprentices from one profession.

#### Research/Practical Implications

Comparing the effect sizes of our employability-JI correlates with evidence from prior studies, employability seems to play an even larger



role for apprentices than for employees in an advanced stage of professional life.

#### Originality/Value

Altogether the results confirmed job insecurity across borders to be an important stressor for young adolescents.

### **Best practices of health promotion at workplaces**

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Purpose of this study was to review good practices of health promotions at workplaces of Estonian public and private sector organizations and describe the changes in health promotion practices during last 2 years.

#### Design/Methodology

Workplaces can provide a healthy culture and environment that is psychologically supportive to the workforce (Knifton, Watson, Besten et al., 2011). In 2011 mentors of the Estonian National Institute for Health Development mentors visited 42 organizations and interviewed 96 employees (occupational health specialists and managers). In 2012 mentors visited 36 organizations and interviewed 68 employees.

#### Results

In medium-sized and large organizations holistic intervention approach is successful, when it consists of physical, mental and social activities. The most popular events are joint training events and sport activities. Organizations support the sport clubs and arrange the healthy food events. In small businesses success factors are flexible working arrangements and working time, health activities with families, health information sharing, collaboration with local authorities. In 2012 the amount of sport activities increased, people share their knowledge and experience about healthy

food, 10 % of them are ready to organize health activities.

#### Limitations

The study was provided among the members of the network for Workplace Health Promotion. In the future we need to compare the practices of members and non-members.

#### Research/Practical Implications

Described best practices can be used as examples for other organizations and as basis of cooperation in health promotion.

#### Originality/Value

It is the first systematic study of the work health promotion activities by comparing them in big and small organizations in Estonia.

### **Expressing true self at work: Workplace authenticity as a mediator of the associations between work characteristics and work outcomes**

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#### Purpose

This study had two aims. First, it tested the validity of a recently developed workplace authenticity scale (IAMWork, Van den Bosch & Taris, 2012). Second, it examined a theory-based model for the associations between work characteristics (demands and resources), authenticity, and outcomes such as engagement and performance. It was hypothesized that authenticity would mediate the associations between work characteristics and outcomes.

#### Design/Methodology

A cross-sectional sample of 680 bank employees from the Netherlands was used. The hypotheses were tested using Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) methods.

### Results

The CFA confirmed the 3-factor structure for the IAMWork scale. Further, SEM showed that job resources were positively associated with high levels of authenticity. Likewise, high levels of authenticity experienced by the employees are related to high levels of work engagement, job satisfaction and job performance. Moreover, authenticity mediated the effects of job resources on these three outcomes.

### Limitations

The largest limitation of this study is its cross-sectional and self-report design, precluding causal inferences.

### Research/Practical Implications

The findings suggest that authenticity is an important predictor of worker well-being and performance. Further research should aim to identify the unique contribution of authenticity to worker functioning, vis-à-vis the effects of similar concepts such as person-environment fit.

### Originality/Value

The present study is among the first to study authenticity in the workplace, and, thus, helps us better understand the influence of workplace authenticity. Findings highlight the importance of expressed self at workplace and the importance of authenticity on certain work-related outcomes.

### **Inauthenticity at work, dispositional authenticity, and personality traits as predictors of work-related rumination: a cross-sectional study.**

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### Purpose

The effort-recovery theory by Meijman & Mulder suggests that individuals unable to recover outside of work may experience ad-

verse psychophysiological effects. Recent research suggests that work-related rumination may extend work-related demands into non-work time resulting in increased levels of work-related fatigue. It is therefore important to understand the factors that predict work-related rumination. This study explored possible predictors - inauthenticity at work (an inability to be 'oneself' in the work environment), dispositional authenticity (the ability to live authentically), and personality traits - of two conceptualisations of work-related rumination: affective rumination and problem-solving pondering.

### Design/Methodology

A heterogeneous sample of 227 adult workers in diverse occupations completed an online survey.

### Results

Predictive models for affective rumination and problem-solving pondering were tested using hierarchical regression analysis in SPSS version 19. Results showed that the most significant predictors for affective rumination were inauthenticity at work, neuroticism, and self-alienation; and the most significant predictor for problem-solving pondering was inauthenticity at work.

### Limitations

It is not possible to establish causation due to the cross-sectional nature of the data.

### Research/Practical Implications

These results suggest that an inability to be oneself - or to be 'authentic' - in the work environment may foster work-related rumination when not at work. This has implications for individual's working in environments inconsonant with their sense of self.

### Originality/Value

Inability to unwind or 'switch off' from work has been tested in previous research but, to the author's knowledge, this is the first study

to examine personality traits and lack of authenticity as predictors of work-related rumination.

### **Social support and innovator resilience potential: Helping innovators to positively adapt after an innovation project termination**

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#### **Purpose**

Innovation projects fail frequently and their termination is likely to negatively affect innovators associated with these projects. This is particularly noteworthy for future innovative activities executed by innovators who have experienced a termination. How, specifically, innovators can be supported during and after a termination to maintain their innovative functioning, however, is not well understood. In this context, Innovator resilience potential (IRP) has been proposed to be important for innovators' future innovative behavior and coping after such terminations.

#### **Design/Methodology**

We establish an empirical measure of IRP and test its relationship to project commitment for validation. Using data from 326 innovators of which 180 have experienced a termination, we find a significant relationship between IRP and project commitment. Moreover, this relationship is contingent upon whether an innovator has previously experienced a termination. We apply this measure of IRP to analyze the relationship between three sources of social support and IRP, examining the subsample of those innovators who actually experienced a termination.

#### **Results**

Leader and organizational support is positively related to IRP, whereas support from family and friends is not significantly related to IRP.

#### **Limitations**

It has to be tested whether the results hold to longitudinal study.

#### **Research/Practical Implications**

Results show how firms can support innovators during and after terminations in that social support from work-related sources appears most important in such situations.

#### **Originality/Value**

To our knowledge, this is the first quantitative empirical study examining the construct of IRP - for which we develop and validate measurement scales - and how to support innovators during and after innovation project terminations.

### **The mediating role of flow at work between job and personal resources and nurses' job satisfaction**

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#### **Purpose**

Many studies investigate healthcare contexts considering the determinants of psychological-physical discomfort, but a more "positive" approach is needed (Kelloway et al., 2008).

Positive psychology proposes the construct of flow at work (Bakker, 2008), a short-term peak experience that can generate motivation and well-being, strongly predicted by job and personal resources.

This study investigates the mediating role of flow at work between job resources (JR) and personal resources (PR), and job satisfaction (an indicator of cognitive well-being; Diener et al., 1985) in an Italian nurses' sample.

**Design/Methodology**

Respondents to the self-report questionnaire were 366 nurses working in an Italian hospital. The measures are: supervisors support (JR,  $\alpha$  .89); job autonomy (JR,  $\alpha$  .75); optimism (PR,  $\alpha$  .70); internal locus (PR,  $\alpha$  .80); flow at work ( $\alpha$  .91); job satisfaction ( $\alpha$  .84).

**Results**

The estimated structural equation model (MPLUS6.1) ( $\chi^2(38)=89.38$ ,  $p<.00$ ; CFI=.97; TLI=.95; RMSEA=.06; SRMR=.04) highlights: JR and PR directly increase flow at work and job satisfaction; flow at work increases job satisfaction; JR indirectly increase job satisfaction through flow at work

**Limitations**

No possibility to keep track of hospital's departments and to do multi-group analysis; the use of a self-report questionnaire and a cross-sectional research design.

**Research/Practical Implications**

Findings suggest the importance to investigate the motivational dynamics at work in the inquired context, the need to favor resources and to promote positive organizational cultures supported by flow experiences.

**Originality/Value**

This study contributes to the lack of "positive" studies in Italian healthcare contexts, and generally, to healthcare studies, often treated from a discomfort point of view.

**Fun in the workplace: A literature review**

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**Purpose**

Organizations have started taking fun as a serious issue. However, to date, academic literature on the subject is relatively rare. The aim of this review is to gain insight into the concept of fun, by highlighting the definitions

of fun in the workplace that exist in the literature and reviewing the ways it has been measured in this context.

**Design/Methodology**

We conducted a search of the major databases and hand searched the references of publications relevant to our topic. We searched the following databases; PsycINFO, Academic Search Elite, Business Source Elite, Science Direct, Scopus, Web of Science, PubMed, JSTOR, SpringerLink and Google Scholar. In order to study the measurement of fun, we included only empirical studies containing original data that explicitly measured fun in the workplace, were written in English and were published in peer reviewed journals between the years 1990-2012.

**Results**

Researchers have proposed several definitions for fun in the workplace (e.g., experience, attitudes, perceptions, activities), but the concept lacks an operational definition. Regarding the measurement of fun in the workplace, there is a shortage of studies that use quantitative approaches.

**Limitations**

Only published studies written in English were included.

**Research/Practical Implications**

Fun is a relatively new concept and needs to be located in an appropriate conceptual framework. This study synthesizes the existing knowledge in order to move one step further and fill the gaps between practice and research.

**Originality/Value**

This is the first study to systematically collate the existing studies regarding fun in the workplace.

### **A cross-lagged analysis of fatigue, work motivation, psychological distress, and absenteeism in novice nurses**

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#### **Purpose**

Nurse fatigue is an important concern for practitioners and managers, given the magnitude of the resultant costs to individuals (e.g., strain and psychological distress) and organizations (e.g., turnover and absenteeism). In order to better understand the motivational mechanisms that may explain the consequences of nurse fatigue, this study tested a model in which fatigue has a unidirectional effect on work motivation (autonomous and controlled), motivation has a unidirectional effect on psychological distress and absenteeism.

#### **Design/Methodology**

Data were collected from 630 nurses at two time points 12 months apart.

#### **Results**

Results from SEM analysis provided support to the hypothesized model. Nurse fatigue had a positive effect on controlled motivation. In addition, taking into account the cross-lagged effects of fatigue on psychological distress and absenteeism, controlled motivation had a positive on absenteeism, whereas autonomous motivation had a negative effect on absenteeism and distress.

#### **Limitations**

This study relied exclusively on self-reported data. Although the longitudinal design improves on previous research, a more comprehensive testing of this proposition—particularly to delineate the mediating role of motivation—would require more than two time points.

#### **Research/Practical Implications**

These results suggest that fatigue leads to psychological and behavioral costs because when energy is lacking, novice nurses use suboptimal psychological accommodation (e.g., internal pressure to meet external demands). A fruitful avenue to break this pattern of results would be to create conditions that reinforce nurses' autonomous rather than controlled motivation.

#### **Originality/Value**

This study advances our understanding of the consequences of fatigue and, specifically, the motivational processes by which fatigue may influence psychological distress and absenteeism in nurses.

### **Got stress? Examining the mediating role of discrete emotions**

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#### **Purpose**

Emotional experiences permeate the workplace and have an impact on critical individual and organizational outcomes such as job performance and well-being, but the role of emotions is largely neglected in stressor-strain studies. We propose a comprehensive model (see Figure 1) that includes discrete emotions as an explanatory mechanism between the role of daily demands and resources and indicators of well-being. Discrete emotions are unique emotional states that include specific emotions such as frustration and distress.

#### **Design/Methodology**

Our theoretical paper responds to calls for increased attention on how discrete emotions influence specific behaviors. We focus on commonly-studied negative and positive emotions (e.g., frustration, distress, anxiety, content) that predict job satisfaction, well-being, and performance within the stressor-strain framework.

### Results

We propose a model that positions discrete emotions as mediators in the relationship between job demands/resources and strain.

### Limitations

Our proposed model is an important first step to integrating the stressor-strain and emotions literatures, but will need to be validated empirically.

### Research/Practical Implications

Our model combines both the stressor-strain and emotions literatures by explicitly integrating the role of discrete emotions. The findings of this research will have practical implications because organizations can provide workshops or training for employees that focus on addressing and managing specific emotions and, as a result, minimize employee strain.

### Originality/Value

To our knowledge, the study is the first to propose a model that explicitly incorporates discrete emotions as an explanatory mechanism between demands and resources and indicators of well-being.

## **Intrinsic and extrinsic orientations in college as predictors of early career development: A seven-year follow-up study**

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### Purpose

This study investigated the developmental consequences of trait intrinsic and extrinsic motivation from college studies to early career. Drawing from Self-Determination Theory, it was hypothesized that intrinsic motivation will predict opportunity for creativity in current occupation, whereas extrinsic motivation will predict income.

### Method

A sample of 204 first-year undergraduates in Hong Kong completed the Chinese Work Pref-

erence Inventory (WPI) in 1998-2000 (Time 1). A sub-sample of 54 participants completed the WPI a second time, reported their current yearly income, and described their current job in 2006-2007 (Time 2). Job descriptions were rated on opportunity for creativity by independent judges.

### Results

Time 1 intrinsic motivation predicted Time 2 opportunity for creativity ( $r = .42$ ), and Time 1 extrinsic motivation predicted Time 2 income ( $r = .43$ ). Yet, Time 2 motivational traits correlated neither with opportunity nor with income.

### Limitations

The sample is small and the attrition is high.

### Research/Practical Implications

Findings indicate that the motivational profile matured at the start of college has enduring effects on early career development and fosters person-job matching seven years later. Yet, students' motivational profile changes in such a way that by when a matching job is obtained, the current person-job matching is what one would expect by chance alone. Possible explanations for this paradox involve environmental/cultural factors and metacognitions.

### Originality/Value

To the author's knowledge, this is the first long-term longitudinal study of intrinsic/extrinsic motivational orientations and their influence on career development. It points out a mismatch between current motivational orientations and current job characteristics that calls for more research and intervention.



### **Job stress: a case from 7 occupation groups in Thailand**

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#### **Purpose**

Our study aims to investigate the kinds of work stress among 7 occupations.

#### **Design/Methodology**

A Thai Job Content Questionnaire (TJCQ) was used for data gathering. The questionnaires were applied to 1032 employees in 7 occupations (factory worker, university staff, elementary teacher, soldier, police, hospitality worker, and nurse) in Songkhla province, South of Thailand. The data collection was started in November 2011. Frequency and percentage were used for data analysis.

#### **Results**

The results revealed that most of the respondents were in the active category of job strain (28.9%) following with low strain (27.0%), passive (23.9%) and high strain (20.2%), respectively. With regard to careers, most of the factory worker (54.3%) was in the high strain category of job strain while most of soldier (54%) was in the passive category of job strain. In addition, the highest proportion of elementary teacher (34.8%), university staffs (44.1%), nurses (30%), and hospitality worker were in low strain category of job strain while the highest proportion of police (49.0%) was in the active category of job strain.

#### **Research/Practical Implications**

The results of the study indicated the kinds of work stress. Such information will benefit employers as they can then develop specific strategies to increase staffs' well-being and hence presumably increase the organization productivity.

### **Presentation of a project concerning job incivility as a social process**

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#### **Purpose**

Job incivility, a recently recognized phenomenon in work- and organizational psychology, includes behaviors that violate the workplace norms for mutual respect and is characterized by low-intensity and ambiguous intent to harm the target (Andersson & Pearson, 1999). The deleterious effects of job incivility for both the individuals and the organization have been discussed. In a newly started project the focus is on job incivility as a social process including the targets, the instigators, as well as the bystanders. A pilot study (Torkelson & Borgstrom, 2012) was conducted with a target perspective to contribute further knowledge about the relationship between perceived workplace incivility and mental health problems, low job satisfaction and intention to leave the organization.

#### **Design/Methodology**

An internet-based questionnaire was sent to 490 white-collar workers in a Swedish organization.

#### **Results**

The results showed that workplace incivility correlated positively with mental health problems, low job satisfaction, and intention to leave. However, when controlling for demographic variables, optimism, quantitative demands, insecurity, control and social support, workplace incivility explained additional variance only in mental health. No additional variance was explained in satisfaction and intention to leave.

#### **Limitations**

The study was made in one organization only.

**Research/Practical Implications**

The results show the importance of considering job incivility in further studies of well-being.

**Originality/Value**

Job incivility is a relatively new area in work- and organizational research.

**Acknowledgement**

The project is financed by the Swedish Council for Working Life and Social Research (FAS dnr 2012-0138).

### **The relationship between eustress, sources of stress and strategies of savoring among university teachers in Portugal**

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**Purpose**

Studies have shown that during a stressful event people may also experience eustress (Nelson & Simmons, 2003). Bryant e Veroff (2007) proposed a model to explain how we attend to, appreciate and enhance positive experiences entitled the savoring process. This research aims to explore the relationship between eustress, sources of stress and strategies of savoring among higher education teachers in Portugal.

**Design/Methodology**

Data were collected by an inventory applied to a sample of 229 Portuguese teachers.

**Results**

Our results suggest associations between eustress and behavioral expression ( $r=0,153$ ;  $n=239$ ;  $p=0,018$ ) and sharing with others ( $r=0,160$ ;  $n=239$ ;  $p=0,013$ ). Our results suggest associations between behavioral expression and organizational climate ( $r=0,138$ ;  $n=239$ ;  $p=0,033$ ) and organizational climate ( $r=0,151$ ;  $n=239$ ;  $p=0,019$ ); behavioral expression and

working conditions ( $r=0,176$ ;  $n=239$ ;  $p=0,006$ ) and between memory building ( $r=0,136$ ;  $n=239$ ;  $p=0,036$ ).

**Limitations**

In future research, it may be beneficial analyze the relationship between variables of our research and other variables such as job satisfaction, distress and coping strategies, making the study of the stress of university teachers more complete and exhaustive.

**Research/Practical Implications**

These results imply that universities should allow sharing, improve the conditions and characteristics of the work and careers of its teachers, fostering high levels of eustress.

**Originality/Value**

This study is a further contribution to the limited research on eustress and strategies of savoring, analyzing systematically, for the first time, the relationship between eustress, factors that cause stress and strategies of savoring among higher education teachers in Portugal.

### **Alexithymia as an independent predisposing factor for the development of burnout syndrome**

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**Purpose**

Although previous studies have tried to identify alexithymia as a risk factor for burnout, they have failed to control for organisational and intra-individual factors which lead to burnout and could confound the relationship. We investigated the association between alexithymia and occupational burnout among nursing students taking into account six work-related risk factors (workload, control, reward, values, community, fairness) and depression, anxiety, extraversion, neuroticism and coping strategies.

### Design/Methodology

The sample consisted of 181 nursing students aged 20-46 years. The measures used were the Maslach Burnout Inventory, the Toronto Alexithymia Scale, the Areas of Worklife Scale, the Beck Depression Inventory-II, the State-Trait anxiety Inventory, the Eysenck Personality Questionnaire and the Estonian COPE inventory.

### Results

Hierarchical multiple regressions were performed to assess the ability of each one of the three alexithymia dimensions to predict the three burnout dimensions, after controlling for six work-related factors and five intra-individual factors. Only one alexithymia dimension (externally oriented thinking style) was significantly associated with one burnout dimension (personal accomplishment) ( $\beta = -.27, p > .01$ ).

### Limitations

The cross-sectional nature of this study does not allow us to draw any conclusions regarding the direction of the association between these two variables.

### Research/Practical Implications

It is of clinical importance to identify, at an early stage, employees whose personality traits predispose them for burnout, in order to develop preventive interventions so that job engagement will be increased.

### Originality/Value

To our knowledge, this is the first study isolating alexithymia as an independent risk factor for burnout.

## **Bureaucracy as a source of pressure in university**

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This paper discusses bureaucracy as a source of pressure for university academics in technical universities. The aim of the cross-cultural study was to clarify whether bureaucracy as a source of pressure is academic culture-specific or whether it is also applicable in dissimilar academic cultures. For this reason Tallinn University of Technology (N=306) as well as Bordeaux University's faculties of science and engineering (N=44) were chosen. A web-based survey of occupational stressors was conducted using the checklist Academics' Occupational Stress Inventory in Estonian and French with 90 separable sources of pressure. Bureaucracy was an influential occupational stressor in both universities, respectively for 60.6% of academics at Bordeaux University and for 42.1% of academics at Tallinn University of Technology. We found that bureaucracy was an even higher ( $p > 0.001$ ) source of pressure for academics at Bordeaux University. The factor Bureaucracy consisted of ten items, in which seven were higher sources of pressure at Bordeaux University, namely different type of reports; attending time-consuming meetings, work in commissions, workgroups; non-realistic deadlines; busyness and/or time demands for tasks within the job, excessive reorganizing, restructuring e.g. organizational change; involvement in decision-making and personal responsibility; ambiguous work instructions (demands), additional tasks, administrative responsibilities. Administrative problems and increasing bureaucracy was a high-level source of pressure in both universities (accordingly 72.7% and 61.8%). Our results hint that bureaucracy, as a source of pressure for university academics is not academic culture-specific.

## **Occupational stress and wellbeing in the Underwater Mission Unit/ Hellenic Coast Guard-Greece**

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#### Purpose

Accumulating evidence has shown that occupational stress has been one of the most crucial factors in the organisational world. The current research aims to investigate occupational stress in a very demanding, both physically and psychologically, Special Forces Unit, namely the Underwater Mission Unit of the Hellenic Coast Guard.

#### Design/Methodology

100 Special Forces members were given ASSET questionnaire that provides information on a number of work related stressors and stress outcomes. ASSET was given twice within a six months' time interval. A qualitative analysis of semi structured interviews followed using Thematic Analysis.

#### Results

A standard multiple regression analysis assessed the ability of ten occupational stressors to predict levels of stress and revealed that a number of ASSET variables significantly impacted upon Physical Health and Psychological Wellbeing both in Time 1 and Time 2. The Thematic Analysis complemented the above findings.

#### Limitations

This study is limited to and concerns military personnel working within Greece. It remains to be tested whether the results generalize to other military occupations in Greece.

#### Research/Practical Implications

An implication that needs to be dealt with is the '*psychological stigma*' evident in the Greek Special Forces, where seeking help for psychological issues is considered a '*weakness*'.

#### Originality/Value

The present study is the first thorough investigation of the topic of occupational stress in the Special Forces in Greece. Consequently, our findings will contribute to the scientific literature with cross cultural benefits, working as a pioneer for future research to be made in Special Forces Units around Greece. New research areas will be under the scope for further experimentation.

#### Well-being in the workplace and individual characteristics

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#### Purpose

This study aims to understand the significance attributed to the concept of well-being in the workplace by employees, its influencing factors and, among those, the role of individual psychological characteristics.

#### Design/Methodology

The research was conducted on a sample of 72 employees utilizing a qualitative approach based on focus groups and individual interviews. Data analysis was performed by a paper and pencil technique.

#### Results

628 statements were collected and divided into three main areas: meaning of well-being in the workplace (248), anykind factors that affect well-being in the workplace (158) and individual characteristics that affect well-being in the workplace (222). The individual characteristics identified by the participants as capable of influencing well-being in the workplace were: being positive, communication, management of difficulties and conflicts, socio-emotional skills, and values.

### Limitations

The research was limited by the subjects involved and by the sole use of the paper and pencil technique of data analysis. Results would be useful for developing training, counselling, and organizational development activities aimed to support small groups, leaders and other strategic players in the construction of the subsystems of well-being in the workplace.

### Originality/Value

The results highlight that well-being in the workplace doesn't depend exclusively on external conditions in terms of the working and organizational environment within which the individual operates. So, it could be promoted not only "from above" through actions by management, but also "from below", influencing individual traits and behaviours.

### **An examination of the curvilinear relationship between workplace bullying and job satisfaction.**

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### Purpose

Research has systematically shown that workplace bullying is detrimental for employees' job satisfaction. Nevertheless, cultural variables may also affect the relationship between workplace bullying and job satisfaction. Based on the review of Southern European literature on bullying at work we hypothesize that the relationship between workplace bullying and job satisfaction is best represented as curvilinear as opposed to linear.

### Design/Methodology

We test this hypothesis in an organizational samples consisting of 1393 employees.

### Results

We found support for the hypothesis. Indeed, the quadratic term for workplace bullying,

added to the linear term produced in the first step a significant increase in explained variance on job satisfaction.

### Limitations

Future longitudinal studies are needed. This relation should be investigated further.

### Research/Practical Implications

Practical implications are discussed in light of the results. We offer directions for future research.

### Originality/Value

The present paper is one of the first to explore curvilinear effect of bullying

### **Belief in a just world as a moderator of the relationships between workplace bullying and physical illness symptoms**

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### Purpose

The purpose of this study was to examine the moderating role of employees' belief in a just world on the relationship between workplace bullying and physical illness.

### Design/Methodology

A total of 296 questionnaires were distributed to employees in private sector in Turkey.

### Results

It was predicted that the positive relationships between workplace bullying and physical illness symptom would be moderated by the mean on BJW such that the relationship would be weaker when the mean on BJW was high as opposed to low. It was found that as expected before ( $\beta = -.44$ ,  $t = -9.35$ ,  $R^2_{deg.} = .16$ ,  $F_{deg.} = 5.287$ ,  $84.8$   $p < .000$ ) as the negative regression coefficients for the interaction, suggesting that the relationship between workplace bullying and physical illness symptom is weaker under conditions of high BJW mean for workplace bullying.

### Limitations

Although the present findings contribute to the literature, some limitations of this study are evident. All of the data were collected from the employees of the same organization. There is the possibility that participants' reactions may be affected by unique features of the organization.

### Research/Practical Implications

The present study tested applicability of the concept of BJW to organizational behavior in a non-western country by examining the role of BJW in moderating the relationship between bullying and physical illness symptom.

### Originality/Value

The unique contribution of this study is to show that belief in a just world is held by individuals and plays an important role in determining their reaction to stressful work conditions independent of culture and religious beliefs.

## **Social-communicative factors in the context of women vocational development**

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### Purpose

Current study was based on a proposal that the high level of social-communicative factors contributed well-being in the vocational development. We explored the interconnection between the indicators of vocational development and the social-communicative factors (the social-communicative competence and personal traits).

### Design/Methodology

We explored 64 women, 23-55 years of age. The methodology: the special questionnaire "Factors of Vocational Development" by M. Petrash, Maslach Burnout Inventory, the method of determination of social-communicative competence by E. Zeer, A.

Pavlova, E. Simanuk, Personality Factor Questionnaire by R. Cattell. Data processing included the comparison of average meanings, correlation analysis and multiple regression analysis.

### Results

Analysis showed that women with the low level of social-communicative competence have troubles both in communicating with other people and in their vocational development. Such factors as warmth, rule-conscious, liveliness, accommodating, emotional stability, self-assurance, practicality, social-communicative adaptability, tendency to cooperation, optimism, frustration tolerance might be considered as the psychological resources of vocational development.

### Limitations

The results of this study can't be generalized to those women whose job isn't connected with communication with people.

### Research/Practical Implications

The results of this study can help a counselor to define the direction of work with a client who has problems in vocational development. The social-communicative factors can contribute to highlight client's personal traits and competence which need to be developed or corrected with counseling or training.

### Originality/Value

The study is the first to define social-communicative factors which can contribute well-being in women vocational development. The results of this study might be important and useful for occupational counseling.



### **Workload and work-family interference: Hindrances or challenges? Evidence from a sample of Romanian healthcare professionals**

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#### **Purpose**

Our aim was to analyze the positive and negative impact of job demands on exhaustion and professional efficacy among healthcare personnel. Work demands are perceived as hindrances (e.g. work-family interference) or challenges (e.g. workload) and have different effects on performance (Lepine, Posdakoff & Lepine, 2005). Job hindrances are circumstances that elicit negative outcomes and inhibit individual's ability to achieve his goals, while job challenges can foster personal growth and employees' achievement. Within this context, our research question was: Could job hindrances and challenges be predictors for positive and negative outcomes, like professional efficacy and exhaustion?

#### **Design/Methodology**

A cross sectional survey of 461 healthcare professionals was conducted in a Romanian teaching hospital. Structural equation modeling with AMOS was used to test our hypotheses.

#### **Results**

Workload was found to have an "U" shape relationship with exhaustion and professional efficacy. High and low levels of workload are associated with high levels of exhaustion and low levels of professional efficacy, but not medium levels. At the same time, work-family interference was found to behave only as a job hindrance.

#### **Limitations**

Two of the study's limitations are: cross-sectional design and not controlling for possible moderators like personality traits.

#### **Research/Practical Implications**

Our findings have implications in terms of job design, suggesting that an optimum of workload should be found.

#### **Originality/Value**

Our paper contributes to the advancement of theory on job demands, showing that workload has an "U" shape relationship with burn-out.

### **Work and home personality: Differentiation or integration?**

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#### **Purpose**

Consistency between work and home personality is associated with greater well-being and performance, while inconsistency is associated with inter-role conflict. Yet there is also evidence for the benefits of an individual having a flexible approach to different situations. We explore this paradox by addressing methodological concerns with previous research and hypothesise that *felt authenticity* is the mechanism through which differences in contextualised personality impact on well-being.

#### **Design/Methodology**

Participants completed a series of questionnaires contextualised for either work or home, while in the appropriate context: a Big Five personality inventory, situation perceptions, and measures of well-being and authenticity. Three weeks later, they completed the same series for the second context.

#### **Results**

Analysis is currently ongoing but will identify the extent of differentiation between individuals' contextualised personalities and the im-

pact of felt authenticity on the relationship between differentiation and well-being. We will further examine the role of situation perceptions in encouraging or limiting contextual personality differences and test

#### Limitations

This study addresses only two broad contexts: 'work' and 'home'. Future research can extend these findings to more narrowly defined contexts. A deeper understanding of the effects of differentiation and authenticity on the individual could be developed through qualitative diary studies.

#### Research/Practical Implications

The findings will provide individuals and organisations with practical recommendations on how to strike a balance between flexibility and consistency of personality and encourage them to consider the importance of authenticity in maintaining employee well-being.

#### Originality/ Value

We address methodological concerns with previous research by adopting a robust and innovative approach to measuring differences between work and home personality.

### **Validation of the German version of the "Survey Work-Home Interaction – Nijmegen" (SWING)**

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#### Purpose

Because of work and non-work requirements in all western countries, Work-life-Balance (WLB) received extensive attention during recent decades. As well educational requirements for students running their career with the new bachelor structure within the Bologna process increased. The purpose of this research is to present an adaptation and valida-

tion of a German version of the "Survey Work-Home Interaction – NijmeGen" (SWING) developed by Geurts.

#### Design/Method/Approach

The SWING was translated into German language and validated with a German student sample (N=288). A confirmatory factor analysis (CFA) was conducted to confirm the four-factor structure found in other studies (Guerts). Additionally criteria validity was analyzed using a job stress scale and an adapted version of Karasek's Job Content Questionnaire to measure study pressure.

#### Results

Results from the CFA replicated the four derived SWING components as in the original version from Geurts et al. The negative Work-Home Interaction scale is positively correlated with health difficulties and with study pressure. The scale has a good internal consistency, comparable to those of the original version.

#### Limitations

This study only looked at study related criteria and not at family related criteria. Another limitation is the sample. Future research should include family-related variables and proof these results using other samples.

#### Research/Practical implications

This study offers a valid instrument to measure work-life balance in the German context.

#### Originality/Value

This study confirmed the factor structure of the original SWING questionnaire for the German language and sample.

### **It's been a hard day's night, and I've been working while sick: The relationship between workaholism and presenteeism**

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 Marco Depolo (Univ. of Bologna, IT)

#### **Purpose**

Workaholics are pushed to invest an excessive amount of time and energy to work in order to go along with their compulsive inner drive. As a consequence, these employees usually attend work even when feeling ill, thus exhibiting high levels of presenteeism. This study aims to investigate the impact of workaholism, as a personal demand, on presenteeism, as a negative outcome, by using the Job Demands-Resources (JD-R) model as theoretical framework. In addition, we explore the moderating role of job resources, i.e. relationship quality in the workplace and peer support, in line with the buffer hypothesis of the model.

#### **Design/Methodology**

Data were collected by questionnaire on a sample of 322 employees (85% males; mean age= 47.4; *SD*= 6.8) working in one of the leading firms in Italy in environmental services management.

#### **Results**

Results of moderated multiple regression analyses supported the buffer effect of relationship quality in the workplace in the relationship between workaholism and presenteeism. In contrast, the buffer effect of peer support was not confirmed.

#### **Limitations**

We used a cross-sectional design, that prevents establishing the direction of the hypothesized causal relations or reversed causal hypothesis. In addition, data were entirely derived from self-report questionnaires.

#### **Research/Practical Implications**

These results suggest the opportunity to invest in job resources in order to manage the negative outcomes of workaholism, among which presenteeism, and to contain the organizational costs in terms of productivity and performance.

#### **Originality/Value**

The study tried to supply the lack of research on the relationship between workaholism and presenteeism through the application of the JD-R model.

### **Use of smartphones for work and well-being in the evening: The role of autonomous and controlled motivation**

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#### **Purpose**

The use of modern communication technology is rising. Recent research revealed that use of smartphones (and other mobile devices) for work in the evening is associated with lower well-being. However, previous research has failed to take the reasons and motives for work-related smartphone use in the evening into account. In this study, based on self-determination theory, we examined the role of autonomous and controlled motivation for well-being in the evening.

#### **Design/Methodology**

A sample of 1714 working individuals responded to an online survey and provided information on the smartphone use in the evening for work, their well-being, and their motivation.

#### **Results**

Hierarchical regression analyses revealed that work-related smartphone usage in the evening was positively related to psychological detachment, but unrelated to recovery and

negative affect, and negatively related to positive affect. Autonomous reasons for smartphone usage in the evening were positively related to recovery, psychological detachment and positive affect. Additional analyses revealed that use and duration of use have differential relationships with detachment.

#### Limitations

The cross-sectional nature prohibits causal inferences, and results need to be replicated in other settings.

#### Research/Practical Implications

The results indicate that the reasons why individuals use their smartphone in the evening matter for their well-being, and that usage must be differentiated from duration of use. Rather than prohibiting this behavior, promoting autonomous reasons might help improve employees' well-being.

#### Originality/Value

These results go beyond previous studies by showing that the reasons for work-related smartphone use need to be taken into account when predicting well-being.

### **The process leading to presenteeism: How can we prevent it?**

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#### Purpose

The phenomenon of presenteeism (defined as showing up for work when one is ill) has only received interest in recent years, with research suggesting that it might cause more aggregate productivity loss than absenteeism (Johns, 2010). Some researchers also founded that job demands can enhance the propensity to work of employees who feel sick and their presenteeism might become a precursor of exhaustion and depersonalization over time

(Demerouti, 2008). In this regard, job insecurity has been considered as a factor that might influence this phenomenon. Starting from these premises, the main aims of this study were to examine the relationship between job insecurity, presenteeism and burnout, and the factors that might moderate this relationship.

#### Design/Methodology

A self-report questionnaire with well-validated scales was administered to 264 teachers (72% female; Mean age = 47.4;  $DS=8.6$ ) of secondary school.

#### Results

Preliminary regression analyses showed a significant interaction effect of the perception of maintenance of psychological contract and school principal support in the relationship between job insecurity and presenteeism.

#### Limitations

Cross sectional design and the exclusive use of self-reported data were the main limitations of this study.

#### Research/Practical Implications

This study shed some light in the prevention of presenteeism. Our findings reveal that, in a threatened situation, employees show presenteeism to prevent resource losses (e.g. job loss), but it is possible to identify some factors that may buffer this relationship.

#### Originality/Value

The present study is one of the first that investigates the role of moderators in the relationship between job insecurity, presenteeism and burnout.

### **Conflict and team climate for innovation: The moderating role of cognitive style**

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Conflict in teams is ubiquitous and whilst once seen as a wholly negative force, empirical research has increasingly demonstrated its multidimensional nature and complex influence on team members, processes and outcomes. However, findings remain mixed (DeDreu & Weingart, 2003) and Jehn (1995) suggested this may be due to individuals processing conflict differently. An important construct in this respect is cognitive style which refers to consistent individual differences in how individuals perceive, think, solve problems, take decisions and relate to others (Armstrong et al., 2012). Individuals tending towards analysis on the cognitive style continuum have a propensity towards a more structured task oriented approach to working while those tending towards intuition prefer to engage in more open ended problem solving and adopt a more holistic approach. Leonard and Strauss (1997) argue that these differences in styles can lead to conflict and creative abrasion but when properly managed and harnessed, the energy released by the intersection of different thought processes will propel innovation. This study examines the relationships between cognitive style, conflict and team climate for innovation. The study involved 94 individuals working across 21 teams engaged in the development of software solutions over a four month period. Data were gathered one week after the teams were formed and one week prior to project completion. Results of a series of moderated hierarchical regressions revealed statistically significant differences between how analytics and intuitives perceive conflict. These findings are argued to have significant implications for both team and conflict management.

### **Transformational leadership, conflict handling and workplace bullying: Testing two models of mediation**

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#### **Purpose**

Escalated conflicts and leadership style are antecedents of workplace bullying. Though, identifying potential causes is important for prevention, a more complex relationship can be drawn upon leadership theory and Individual Psychology. Therefore, we tested two competing mediation models.

#### **Design/Methodology**

Research data were obtained from anonymous self-report questionnaires collected in two Lithuanian organizations in 2012 ( $n = 263$ ). *Transformational leadership* was measured with the Global Transformational Leadership scale (Carless et al., 2000), ( $\alpha = .95$ ). The Dutch Test of Conflict Handling (De Dreu et al., 2001) was used for the measurement of 5 conflict handling strategies: problem solving ( $\alpha = .79$ ), compromising ( $\alpha = .71$ ), yielding ( $\alpha = .69$ ), avoiding ( $\alpha = .53$ ) and forcing ( $\alpha = .72$ ). Workplace bullying was measured using Revised Negative Acts Questionnaire (Einarsen et al., 2009), ( $\alpha = .90$ ).

#### **Results**

Sobel test did not support mediation effect in the first hypothesized model. However, it supported mediation based on the arguments of Individual Psychology. Transformational leadership was identified as a mediator in the relationship between problem solving, compromising, yielding and workplace bullying.

#### **Limitations**

Cross-sectional data and single source measures are suboptimal to study mediation extensively.

### Research/Practical Implications

Results suggest that conflict handling strategies related to concern for the other (dual concern model) are related to more complementary view of the direct supervisor and in turn to less exposure to workplace bullying. Thus, Individual Psychology ideas, suggesting that conflict solving is a part of personality seems to have an explanatory power in our case.

### Acknowledgements

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### **Interpersonal conflicts at work and their impact on organizational attitudes and health: An experimental study**

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### Purpose

This research was conducted based on Glasl's (1999) Conflict Escalation model, the Gender Role Assumption theory (Eagly, 1987) and previous findings on interpersonal conflicts specifically on rivals' positions (Frone, 2000). The aim was to determine whether the depicted conflict situation has impacts on organizational attitudes (commitment, turnover intentions, contra-productive behavior) and health (positive vs. negative mood).

### Design/Methodology

We applied a 2 (conflict intensity: weak vs. low) x 2 (rival's position: supervisor vs. colleague) x 2 (rival's position: male vs. female) factorial design to test our hypotheses. The participant ( $N=82$ ) read a scenario in which his rivals criticized his supervised project in a meeting. His rivals threatened by asking his withdrawal from the project (weak conflict) or dismiss him from the project (strong conflict). In addition, participant's conflict management

style was applied as a control variable in the study.

### Results

Findings from ANCOVAs indicated that gender and position influences organizational attitudes and health. Interestingly, while 'avoiding' conflict management style was associated with negative mood, 'dominating' was more related to positive mood.

### Limitations

The research was conducted in the lab with students as the sample.

### Research/Practical Implications

The position of supervisors have variety of impacts: abusive or destructive. Conflicts with colleagues were less severe than with the supervisors as expected.

### Originality/Value

The experimental nature assisted in determining the causality effect accurately. The findings could be additional contribution to the field and lead to productive and non-productive results, wherever a conflict may fall on this continuum, it will always affect organizational life.

### **Workplace bullying in Southern-Europe: Prevalence, job satisfaction, and psychological well-being in Italy and Spain**

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### Purpose

The purpose of this study is to examine the prevalence rate of workplace bullying in two Southern European countries, Italy and Spain, and its differential consequences on employees' job satisfaction and psychological well-being. Evidence has shown that the estimation method of workplace bullying may be biased: lower prevalence in Southern and Eastern



European countries because the phenomenon is not yet well-known for the audience and its knowledge is partial or faulty ("awareness hypothesis").

#### Design/Methodology

Cross-sectional study, in which a sample of 1,151 employees in Italy and 705 in Spain filled in a questionnaire about workplace bullying, psychological well-being and job satisfaction. Additional results from the ESENER survey were taken into account.

#### Results

Results suggest that no differences exist in bullying prevalence among these two Southern European countries since they share some cultural values. However, we found a moderated mediation model: the impact of workplace bullying on employees' psychological well-being depends on the level of perceived job satisfaction, and this indirect effect is moderated by the country.

#### Limitations - Research/Practical Implications

Despite of the cross-sectional nature of the study, findings capture cultural differences in the bullying phenomenon, which may have several implications for further research in this domain as well as for designing interventions to deal with workplace bullying.

#### Originality/Value

The present paper establishes the roots to assess workplace bullying from a cultural approach and compare the magnitude and consequences of workplace bullying among countries.

### **Antecedents of workplace bullying: An individual psychology approach**

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*(Vytautas Magnus Univ., LT), Guy Notelaers (Radboud Univ. Nijmegen & Univ. of Bergen)*

#### Introduction

Since the research lifted off in 80's, workplace bullying and its underlying factors have been addressed from different theoretical perspectives (Attribution theory, social identity theory, stress theory, etc.). Notwithstanding the valuable contributions these perspectives have brought, no attention has been spent on the potential of theory of Individual Psychology. Family dynamic constructs, the concept of lifestyle derived from Individual Psychology approach may help to explain a number of concepts that are present in organizations.

#### Purpose

To provide a conceptual framework ingrained with the principles of Individual Psychology to explain antecedents (conflict solving styles, job characteristics, leadership style, and personality) of workplace bullying.

#### Results/Conclusions

The final model includes direct as well as indirect relationships, comparing leadership with parenting and presenting hypothesized relations with conflict handling, job characteristics and workplace bullying. Model also represents lifestyle impact on conflict handling as well as predicted moderating effects of lifestyle on various relationships.

#### Research/Practical Implications

An important next step is to establish empirical evidence that would support our claims. Apart from the empirical evidence, we believe that bringing extensive theory of Individual Psychology may serve for the prevention.

#### Originality/Value

This is the first attempt to integrate theory of Individual Psychology to address antecedents of workplace bullying. Such research may lead to identifying preventive interventions related to workplace bullying, e.g. lifestyle assessment and training, leadership development according to the principles of social interest and encouragement.

### **Workplace psychological harassment, basic needs satisfaction, and employee functioning: A cross-lagged analysis**

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#### **Purpose**

Drawing on self-determination theory (SDT, Deci & Ryan, 1985, 2008), this two-wave study proposes a model investigating the causal relationships between exposure to workplace psychological harassment, basic needs satisfaction (i.e., autonomy, competence, and relatedness) and employee psychological and professional functioning (i.e., life satisfaction and self-reported performance).

#### **Design/Methodology**

Cross-lagged analyses based on two waves over a 12-month period were conducted. A total of 699 nurses participated in this study.

#### **Results**

SEM analyses provided partial support for the proposed model. Specifically, T1 exposure to workplace psychological harassment negatively predicted T2 need for autonomy as well as life satisfaction. Additionally, taking into account the cross-lagged effect of workplace psychological harassment on employees' psychological and professional functioning, T1 needs for autonomy and competence positively predicted T2 performance.

#### **Limitations**

This study is based on self-reported data, which causes concern for common method bias. Also, the analyses were conducted using only two time points. Future studies should attempt to validate the findings using multi-source data and three time points.

#### **Research/Practical Implications**

Managerial practices aimed at supporting employees' psychological functioning could

attempt to prevent and minimize situations of psychological harassment as much as possible. Also, employees' professional functioning could be enhanced by facilitating employees' needs for autonomy and competence.

#### **Originality/Value**

This study offers new insight into the causal relationships between workplace psychological harassment, basic needs satisfaction, and employees' psychological and professional functioning and highlights the importance of acting out of a sense of volition (i.e., autonomy) and feeling capable of mastering one's environment (i.e., competence).

### **Interpersonal mistreatment at work and burnout among teachers**

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#### **Purpose**

The current study aims to investigate how various forms of interpersonal mistreatment in the workplace (i.e., abusive supervision, ostracism, undermining, incivility, and unwanted sexual attention) relate to dimensions of burnout (i.e., exhaustion, cynicism, and professional inefficacy). More specifically, we argue within the frame of the Job Demands – Resources model (the JD-R model) that higher levels of interpersonal mistreatment, as job demands, are important antecedents of higher levels of burnout.

#### **Design/Methodology**

Romanian teachers (N=201) participated in this study in 2012 by filling out a questionnaire. Hypotheses were tested using hierarchical regression analysis, controlling for age, gender, job tenure, and the number of hours worked each week. Relative weights analyses

were conducted to partition the explained variance of the multiple predictors.

#### Results

Interpersonal workplace mistreatment associated positively with burnout. Interestingly, relative weights analyses indicated ostracism as the antecedent which explained the highest amount of variance in all of burnout's dimensions.

#### Limitations

The analyses are based on cross-sectional data, obtained from a single source (i.e. employee perceptions). Hence issues related to causality and common method variance pose a risk. Future research on this topic should address the causality issue.

#### Research/Practical Implications

Even though interpersonal mistreatment in the workplace, in all its investigated forms, relates positively to burnout, various forms of mistreatment seem to be differently relevant for the burnout dimensions. In practice, the current results may bring additional value when investigating ways to reduce burnout in teachers

#### Originality/Value

This study is one of the first to focus on the relationship between various interpersonal workplace mistreatment forms and burnout.

### **Personal well-being in organizations and perception of organizational support among the public security workers in Brasilia - Brazil**

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#### Purpose

Public security workers perform relevant tasks in the social context. Besides this, their per-

sonal well-being is important for job performance. This empirical study aims at verifying, for the police workers, the relation between the Personal Well-being in Organizations and their Perception of Organizational Support.

#### Design/Methodology

The survey evaluated the perceptions of 159 policemen working in streets and in preventive operations (known in Brazil as military policemen). The age group is 37 to 52 years (mean is 45,3), from which 93.7% (N=150) are male. The degree of education rates 42.1% for the secondary school, 22.4% for incomplete tertiary education, 30,9% for bachelor degree, and 4,6% for postgraduate.

#### Results

The descriptive analysis for Personal Well-being in Organizations presents a (mean = 2.59). The mean values for the Perception of Organizational Support show above-average means on Social Support (mean= 3.52), Task Overload (mean= 3.10), Management Style and Supervision (mean= 3.04) and Material Support (mean= 3.01). The linear regression ( $R^2 = 0.50$   $p < 0.01$ ) points that the Style and the job position can positively predict, and that Task Overload can negatively predict the Personal Well-being in Organizations.

#### Limitations

The survey aimed the military policemen only. Nonetheless, the operators of the public security in Brazil encompass several categories.

#### Research/Practical Implications

The findings offer a contribution to managers toward a better understanding of the relationship employee-organization.

#### Originality/Value

Among the many studies that focus on the public security in Brazil, only too few analyze the relation between the organizational context and the personal well-being.

### **Work changes and quality of life in a group of workers in Bogotá Colombia**

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#### **Purpose**

From a sociocultural perspective, the structures of work, the flexible reorganization, and the labor protection systems are studied; as well as how these changes made sense by a group of workers in Bogotá, Colombia, and the impact these have in their quality of life and their perspectives in the future.

#### **Design/Methodology**

It's a qualitative study, based on semi-structured interviews to 30 Colombian workers, who have different ages and occupations.

#### **Results**

According with Stauss & Corbin (2002), different matrixes were organized with the following meaningful categories: Changes in labor conditions, quality of life, and labor future.

Associated to changes in work settings, technology, time conception, and legal norms are found. Pressures, such as excessive work, less occupational compromise, and more competitiveness, affect quality of life. The working future is now seen as uncertain, and difficult. It is finally concluded, this Colombian workers are aimed as vulnerable, over pressured and over commanded, exposed to informality, and to precarious conditions.

#### **Limitations**

By being a qualitative investigation, it does not pretend to generalize results. It is situated in specific scenery, and in a particular time.

#### **Research/Practical Implications**

The results contribute to knowledge about the ways a worker's ways of living in specific contexts of labor flexibility, and the impact in the worker's well being, and working future.

#### **Originality/Value**

By interpreting worker's narratives in periphery countries, the organizational and labor perspectives are enriched, and more ways towards a greater well being and quality of life, are proposed.

### **Subjective and objective indicators of job stress and burnout in a residential home for the elderly**

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#### **Purpose**

The aims of this study were: a) to investigate the level of burnout and its organizational sources in a sample of eldercare workers by means of the integration of subjective and objective tools, and b) to compare the organizational well-being between health care staff and nursing aides.

#### **Design/Methodology**

The sample included the totality of the elderly workers employed in a residential home for the elderly ( $n=49$ ; response rate: 100%). The *Maslach Burnout Inventory-GS* and the *Areas of Worklife Scale* were used for the subjective assessment of burnout and organizational risk factors. A check list of objective indicators was used for the objective assessment of job stress.

#### **Results**

Results from the questionnaires showed high levels of exhaustion, workload and unfairness for the total sample. Objective parameters of job stress were biomechanical overload, dealing with suffering people and the risk of work-related violence. Nursing aides had greater risk of burnout and reported a greater number of both subjective and objective sources of stress, compared to health care workers.

### Limitations

This was an exploratory study and the sample size is small but it represents the totality of elderly workers employed in the residential home for the elderly.

### Research/Practical Implications

These results support the integrated use of subjective and objective assessment as the most comprehensive approach for the evaluation of job stress and for the implementation of preventive interventions.

### Originality/Value

This is one of the few studies which have investigated job stress and burnout, in the specific eldercare context, using an integrated assessment.

## **Well-being and health-related behavior among university staff: The role of attitude toward health**

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### Purpose

This study addresses the improving of well-being among university lectures via their health-related behavior and analyzed differences in attitudes towards health between people at different stages of change process. It was hypothesized that emotions would influence the change process.

### Design/Methodology

A cross-sectional design was employed; participants were 63 adults (24 males, 39 females, mean age 42.5 years). The variables (components of well-being, health-related behavior, cognitive and emotional aspects of attitude towards health) were assessed using content analysis of written documents (essays).

### Results

3 subgroups were identified on the basis of transtheoretical model: (1) lectures with healthy lifestyle (stages Action and Maintenance) - 24%; (2) with risk behavior (Precontemplation) - 13%; (3) 'preparing to change' (Contemplation and Preparation) - 63%. The results show significant relations of emotions and intrinsic motivation (actualized need of health) to positive changes in behaviors. The prevalence of extrinsic motivation and frustrated need of health was found in group 2, significantly higher than that reported in other groups.

Limitations

The results of this study should be interpreted with caution as the study is based on a small sample limited to one organization. However, our findings give rise to several questions for future research.

### Limitations

The results of this study should be interpreted with caution as the study is based on a small sample limited to one organization. However, our findings give rise to several questions for future research.

### Research/Practical Implications

These findings suggest a role for emotions in explaining the link between attitude toward health and positive behavior changes among university lectures. The significance of results for health promotion will be discussed.

### Originality/Value

The study is one of the first attempts to conduct research project in the area of Qualitative Health Psychology in Russia.

## **Life and work satisfaction in emergency volunteers, between demands and resources**

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### Purpose

Working in emergencies can offer significant rewards but exposes rescuers to psychosocial risks and traumatic reactions with consequences in their social and affective relations (Ohaeri, 2003). This study, assuming the theoretical framework of job demands-resources model (Bakker and Demerouti, 2007), aims to



investigate the impact of some demands (role conflict, emotional dissonance) and resources (organizational and family support, debriefing opportunities) on life satisfaction (LS) and job satisfaction (JS) in a sample of volunteers operative in emergency situations.

#### Design/Methodology

The research involved 352 ambulances rescue volunteers through a questionnaire collecting: JS, LS, demands and resources mentioned above. Data analysis (PASW 18) included: descriptive, correlation and multiple regression analysis. Cronbach's alpha coefficients are between .75/.91.

#### Results

The results identify a positive relationship between family support, debriefing opportunities and LS (8% explained variance) and between debriefing opportunities, family support, superiors support and JS (explained variance 15%).

#### Limitations

It is a cross sectional study: causal relationships cannot be estimated. Furthermore, only some antecedents have been included: i.e. personal characteristics have not been considered as antecedents or moderators.

#### Research/Practical Implications

The results suggest the importance of organizational effort to diffuse a supportive culture, through both relationship and debriefing. The results also suggest the importance of awareness and support within non-working domain involving rescuer's families.

#### Originality/Value

The research addresses a topical issue. The knowledge of factors affecting JS/LS, considering both general and specific (i.e. debriefing) job features, helps to identify important implications for practice to support operators' health and resilience.

### **Organizational culture and work stress: Stability during changes**

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#### Purpose

Organizational culture is the values and behaviors that contribute to the unique social and psychological environment of an organization. When employees are unable and/or unwilling to fit their behavior into the relevant formats provided by the culture, they experience stress, and their behavior becomes less effective. In this study we analyzed (1) the change/stability of work stress level in an organization during times of economic recession, (2) the relationship between work stress and types of organizational culture.

#### Design/Methodology

Longitudinal study with several measurements in a privately owned company specializing in sales and maintenance of professional tools and equipment in Baltic states. R.Harrison's typology of organizational culture was used to measure perceived and preferred organizational culture; work stress was measured with 20-item questionnaire comprising various stressors caused by role demands, interpersonal demands, workplace policies, work and job demands.

#### Results

General level of employee work stress, as well as dominant and preferred types of organizational culture did not change between 2007/8-2010, although stress induced by job conditions (work overload, pay, career security) increased a bit. Centralization was related to higher levels of work stress; i.e. employees with higher stress level wish to diminish power and role oriented aspects of culture and increase achievement and support orientation.



#### Research/Practical Implications

Interventions promoting employee well-being and effectiveness should foremost focus on creating systems/procedures that give the feeling of support and proper recognition of individual work achievements.

#### Originality/Value

To our knowledge there is not much studies analyzing the relationship between work stress and organizational culture longitudinally in times of economic hardship.

### **The compensatory tracking task: Sleepiness assessment using computational intelligence**

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#### Purpose

For safety critical tasks 'fit for duty tests' are desirable and necessary. The Compensatory Tracking Task (CTT) was proposed to utilize for such tests. Recorded signals were analyzed by methods of adaptive signal analysis and computational intelligence. Sensitivity as well as specificity was evaluated and compared with two sleepiness tests with different functional principles.

#### Design/Methodology

The CTT is a visuo-motoric task with a fixed target presented in the center of a computer screen. The subject uses a trackball to keep a cursor as near as possible to the target. During the ten minute lasting task this cursor is continuously repelled from the target with varying intensity and direction. Ten volunteers participated in a pilot study and performed the test in wakeful state (time since sleep < 5h) as well as in in sleepy state (TSS > 18h).

#### Results

Spectral domain features in combination with support vector machines yield classification accuracies of  $93.7 \pm 10.6$  %. Test duration can be reduced to 6 minutes without significant deterioration.

#### Limitations

An increased number of subjects and trials per subject is required in future research to evaluate inter- and intra-individual variability.

#### Research/Practical Implications

The CTT is a promising candidate for sleepiness assessment in occupational environments. Compared to other approaches CTT's advantages are a high accuracy, ease of use and low costs.

#### Originality/Value

A new data analysis approach increases the accuracy of sleepiness assessment using the CTT which has been introduced 1996 by Makeig and Jolley.

### **Demographic and occupational risk factors for burnout among German academics**

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#### Purpose

Several studies have found that university faculty members are prone to burnout-associated problems (Otero-López, Mariño, & Bolaño, 2008; Taris, Schreurs, & Van Iersel-Van Silfhout, 2001) or even suffer from burnout (Lackritz, 2004). We conducted a survey among German academics to look at demographic risk factors of burnout (gender, age) as well as occupational risk factors (position, workload, teaching, research, role conflict, social support). Burnout dimensions were emotional exhaustion, cynicism, and personal efficacy.

### Design/Methodology

An online survey was conducted among academic employees of German universities ( $N = 171$ ). We used a German version of the Maslach Burnout Inventory-General Survey (MBI-GS) by Büssing and Glaser (1998). Occupational risk factors of burnout were measured by different scales.

### Results

Analyses of demographic risk factors revealed that age contributed to personal efficacy, and gender had no impact on any of the burnout facets. For academic position (research assistant vs. professor) we found differences in personal efficacy. A series of hierarchical multiple regression analyses revealed that less social support and higher teaching stress predict all manifestations of burnout, whereas other occupational risk factors (i.e., workload, role conflict, and research) yield different relationships across the three burnout dimensions.

### Limitations

More factors influence burnout and its dimensions, e.g. personality factors. We did not consider all of them in our study. A longitudinal research design would be better to predict burnout.

### Research/Practical Implications

Results should be used to identify stressful working conditions for academic staff and to implement measures to reduce these conditions.

### Originality/Value

To our knowledge this is the first study referring to risk factors of burnout within a sample of German academics.

## **How can we measure the impact of self-awareness at work? Construction of the Self-Awareness Outcomes Questionnaire**

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### Purpose

Attempts to improve self-awareness are central to many employee development and support interventions; and although the importance of self-awareness to well-being is well documented, its practical impact at work remains difficult to measure. We address this need by developing the Self-awareness Outcomes Questionnaire (SAOQ).

### Design/Methodology

We developed a comprehensive list of SAOQ items from three sources: a thorough literature search, analysis of reported outcomes of employee development workshops, and focus group discussions with counsellors experienced in developing client self-awareness.

A stratified sampling approach recruited 200 participants from four different populations, representing theoretically different levels of self-awareness. Participants completed an online questionnaire battery including measures of different conceptualisations of self-awareness (the Reflection-Rumination Questionnaire, Mindful Attention Awareness Scale and the Self-Reflection Insight Scale), the SAOQ items, and engagement in mindfulness practices.

### Results

While full analysis is ongoing, initial results demonstrate a theoretically-consistent factor structure and high internal reliability for the SAOQ, as well as expected differential relationships with aspects of the self-awareness concept.

### Limitations

Although SAOQ items were developed from a longitudinal study, further work could explore the immediate versus delayed outcomes of improved self-awareness, as well as confirm the factor structure in different populations.

### Research/Practical Implications

The SAOQ, a comprehensive, psychometrically sound self-report questionnaire, can be used to demonstrate the utility of improved self-awareness in a range of developmental contexts at work. We also contribute to improved theoretical understanding of the self-awareness and mindfulness concepts.

### Originality/Value

The SAOQ is the first questionnaire to enable practitioners and researchers to measure the practical impact of self-awareness interventions on employees' work lives.

## Job stress as a predictor of procrastination in project team members

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### Purpose

Modern world demands high level of life/work structure. Different organizations have to reduce their charges. Therefore the great number of services becomes outsourcing. Other way to increase organizational benefits lead to project teams (PT) building up. The main problems in this decision link with high necessity of PT members' self-regulation. One of the reasons of PT members' self-regulation failure is procrastination phenomenon. Over 15-25% of people demonstrate procrastination behavior (Kachgal et al., 2001). Procrastination can be analyzed as a type of inadequate coping behavior, and it correlates with high level of stress (Tice, Baumeister, 1997; Sirois, Pychyl, 2002). Thus, the main purpose of this research

is to analyze the procrastination phenomenon in PT members with different job stress level.

### Design/Methodology

We collected the following data: objective measures (age, gender); General Procrastination Scale (Lay, 1986); Job Diagnostic Survey (Hackman, Oldham, 1980); Survey for actual and chronic stress manifestation assessment (Leonova, 2004). 52 respondents from several PT were under study.

### Results

Subjects show high level of stress manifestation and moderate level of procrastination. Regression analysis was also conducted (adj. R-squared=0.457,  $p < 0.001$ ). Only appraisal of cognitive tense level ( $\beta = 0.663$ ,  $p < 0.001$ ) and chronic resource exhaustion ( $\beta = -0.253$ ,  $p < 0.01$ ) emerged as significant predictors of procrastination.

### Limitations

Obtaining results could be more reliable if the sample would be extended.

### Research/Practical Implications

Conducted research should help in PT members' job organization in order to protect them from deadline breakdowns.

### Originality/Value

Procrastination reduces the organizational efficiency, that's why the question of its predictors has a high practical value.

## Standby duty and well-being in aviation: Moderating effects of personality factors

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### Purpose

Standby duty is an aviation specific form of on-call work that can be described as background duty. Employees can freely choose their whereabouts, but have to be available

and must be at work within a certain time. Research in other sectors shows negative impacts of on-call work on employees in terms of increased stress and impairment of sleep and mental health (Nicol & Botterill, 2004). These effects occurred regardless of whether the employees were called to duty (Vahle-Hinz & Bamberg, 2009). In this study we investigated the impact of standby on the well-being of aviation personnel. Moreover, we considered moderating effects of personality traits like flexibility, self-efficacy, and worry disposition.

#### Design/Methodology

Pilots and flight attendants of a German airline (N=38) participated in a diary study comparing standby duty and day off. At three times a day data concerning well-being, quality of sleep, work-family conflict, and recovery were gathered. An online questionnaire was used to assess organizational factors and personality.

#### Results

As hypothesized, multilevel analyses conducted using HLM show that standby duty has a negative effect on well-being, sleep quality, work-family conflict, and recovery. Moderation analyses show that aviation personnel with higher flexibility and self-efficacy as well as a lower worry disposition suffered less from the negative impact of standby.

#### Limitations

As the sample is comparably small and limited to short-haul flights it remains to be tested to what extent our results can be generalized to other aviation personnel conducting long-haul flights.

#### Research/Practical Implications

Practical implications are discussed.

#### Originality/Value

To our knowledge, the study is the first to systematically analyze standby duty and its effect on well-being.

### The role of mindfulness in increasing firefighters' well-being

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#### Purpose

Research on firefighters has been mainly focused on negative effects deriving from their activity. Although recent studies have demonstrated that mindfulness enhancement may improve firefighters' well-being, little attention has been paid to this topic (Smith et al., 2011). Therefore the aim of this study was to investigate the influence of mindfulness on well-being.

#### Design/Methodology

The Mindful Awareness Attention Scale (MAAS; Brown & Ryan, 2003), the General Health Questionnaire 12-item scale (GHQ-12; Goldberg & Williams, 1988) and the Secondary Traumatic Stress Scale-Italian version (STSS-It; Setti & Argentero, in press) were administered to all the professional firefighters of an Italian town (N = 98).

#### Results

Multiple regression analyses revealed the negative influence of mindfulness on intrusion ( $\beta = -.443$ ,  $p < .01$ ) and arousal ( $\beta = -.675$ ,  $p < .01$ ), on general dysphoria ( $\beta = -.473$ ,  $p < .01$ ) and social dysfunction ( $\beta = -.287$ ,  $p < .01$ ) suggesting that it may decrease post-traumatic symptoms and psycho-physical complaints, improving well-being.

#### Limitations

The cross-sectional design of the study doesn't allow to interpret in a causal perspective the relationships found. Moreover, it could be interesting to extend the research to volunteer firefighters.

#### Research/Practical Implications

The influence of mindfulness on firefighters' well-being suggests the opportunity to implement mindfulness-promoting interventions.

Then people could learn to regulate distressing thoughts and feelings that occur in response to stressful events.

#### Originality/Value

Many studies have investigated emergency workers' well-being but, to our knowledge, this is one of the first studies that analyzes firefighters' well-being as potentially determined by mindfulness.

### **Opportunities and threats concerning the buzzword 'burnout': A qualitative study with experts and patients**

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#### Purpose

The Burnout Syndrome is a highly frequented topic in contemporary media, turning the phenomena more and more into a buzzword. Considering the impact this has on the public's perception towards the concept, the question arises what effect this has on the patients themselves. Furthermore, the discussion over the connection between the syndrome and depression raises the thought as to which way the public, as well as the patient's friends and family, can differentiate between those two concepts.

#### Design/Methodology

In this study patients diagnosed with burnout and experts within this field are questioned about the consequences of such a phenomenon. The semi-structured interviews were analyzed according to the Grounded-Theory-Method by Glaser and Strauss.

#### Results

Results show that burnout and depression are also closely linked in practice. Patients suffer from the public stigma surrounding mental illnesses, despite the fact that burnout is a buzzword. Even with family and friends the

patients show affected behavior, using different words for their condition and being open to only very few.

#### Limitations

Each of the interviewed patients lists additional symptoms of depression. Hence a clean differentiation between the impact of the two concepts cannot be fully presented.

#### Research/Practical Implications

Nevertheless, the results suggest further extensive research on the media's influence and its future consequence on the stigma of mental illness.

#### Originality/Value

At present, it is more important to focus on the patient's handling with the condition and the involvement of the family and friends rather than the differentiation between the diagnoses of Burnout and depression.

### **Affective commitment: The roles of organizational justice and job burnout**

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#### Purpose

The main purpose of the present study is to determine the relationship between organizational justice, job burnout and organizational commitment an attempt of building structural equation model.

#### Design/Methodology

The participants were 435 university's teachers at 5 universities in China. Teachers were informed that their participation was voluntary and all participants were guaranteed confidentiality and anonymity

The instruments used were the Maslach Burnout Inventory (MBI) by Maslach and Jackson (1993); the Organizational Justice Questionnaire by Colquitt (2001) and the Organization-

al Commitment Questionnaire by Meyer and Allen (1997).

#### Results

Path analyses were conducted with Amos 19.0. The results showed that organizational justice was a strong predictor of affective commitment. Specifically, of all the three dimensions, interactional justice predicted affective commitment the most strongly, whereas distributive justice, unexpectedly, had no significant influence on affective commitment. Also job burnout acted as a vital mediator of the relationship between organizational justice and affective commitment. Furthermore, it was found that both emotional exhaustion and reduced personal accomplishment were important partial mediators of the relationship between interactive justice and affective commitment.

#### Limitations

The relative loose organizational structures of Chinese universities and that it used a cross-sectional design.

#### Research/Practical Implications

These findings manifested that organizational justice can directly positively influence affective commitment; meanwhile, it also can indirectly positively influence affective commitment via its reducing job burnout.

#### Originality/Value

This study provided a conceptual foundation for research on Chinese university teachers' organizational commitment. Specifically, the current study examined two important antecedents of affective commitment, i.e., job burnout and organizational justice.

### **Handling customer stressors in service organisations: Is employee age important?**

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#### Purpose

This study examined age differences on stress management strategies and burnout as a response to customer stressors in the retail / service industry thus investigating age differences between young and middle-aged employees as opposed to the more common focus in the research literature on older workers.

#### Design/Methodology

A cross-sectional questionnaire was completed by customer-facing employees (n=273) in a UK national retail organisation.

#### Results

Age was negatively related to customer stressors but not directly related to stress management strategies. Moderation analysis revealed no interaction between customer stressors and age on burnout, whereas the older retail employees were less likely to experience cynicism when exposed to disliked customers, and their coping strategies generally had a more positive effect on burnout compared to younger employees. Exploratory 3-way analysis of customer stressors, age, and stress management strategies on burnout revealed younger employees were less successful in using downplay and humour in stressful situations to reduce their levels of emotional exhaustion and cynicism.

#### Limitations

A major limitation is the cross-sectional design of the study although since age cannot experience reverse causality this does not limit conclusions on causality. Other limitations include self-report measures, and the young age of employees, albeit representative of the industry.



**Research/Practical Implications**

Younger employees may require support to more successfully use stress management strategies and protect health.

**Originality/Value**

This research helps create a greater understanding of the relationship between age, coping and burnout, and reports age differences between young and middle-aged employees. This research has significance for management practice given the typical age profile of the retail / service sector.

**Job demands-resources balance effects on a sample of Italian teachers**

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**Purpose**

This study examines the effect of the relation between the balance of job demand variables (emotional labor, discipline problems, time pressure, relation to parents, psychological demands) and job resource variables (self efficacy, social support and decision latitude) on burnout and work engagement in a sample of Italian teachers.

**Design/Methodology**

*Participants:* a sample of voluntarily recruited Italian teachers (N=187) of primary and secondary school.

*Measures:* The Italian version of: ELS (Brotheridge & Lee, 1998) measures surface and deep acting. Three subscales of PSCS (Skaalvik & Skaalvik, 2007) measures the perceived school content. Three subscales of JCQ measures the job contest (Karasek, 1985). The TSE (Schwarzer & Jerusalem, 1999) measures efficacy beliefs of teacher. The GSE (Swarzer, et al., 1995) measures the general self efficacy.

cy. MBI-GS (Maslach et al., 1996) measures burnout. UWES (Schaufeli et al., 2002) measures work engagement; OSI (Cooper et al., 2000) measures the frequency of stress related physical symptoms.

**Results**

Resources moderate the relation between job demand variables and burnout. The balance between job demands and resources have different effect on burnout and physical health of teachers and on the intention to change job. Moreover, self efficacy appears as a good predictor of teacher work engagement.

**Limitations**

The administration of questionnaires during working hours might have resulted in the exclusion of the most severe cases of teacher burnout.

**Research/Practical Implications**

Designing training experiences for teachers based on the JD-R balance and teacher self efficacy to enhance awareness about their emotional strategies at work.

**Originality/Value**

The inclusion of TSE and EL in the *Balance* between JD-R variables.

**The impact of work engagement and workaholism on well-being among a PhD student population: What kind of support do they need?**

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**Purpose**

Our study focused on work engagement and workaholism, and their relationships with well-being among a PhD student population. More precisely, we examined how work engagement and workaholism mediate the relationships between three forms of support (i.e.,

perceived organizational support, POS; perceived advisor support, PAS; perceived colleagues support, PCS) and various indicators of well-being (i.e., job satisfaction, perceived stress, and sleep problems).

#### Design/Methodology

An online questionnaire was administered to 343 PhD students from a Belgian university. Each concept was measured using validated scales.

#### Results

Results from SEM revealed that POS has a direct positive impact on job satisfaction and a negative impact on perceived stress and sleep problems. Work engagement and workaholism did not mediate these relationships. In contrast, work engagement mediates the influence of PAS on job satisfaction and perceived stress. Furthermore, workaholism was found to mediate the relationship between PCS and job satisfaction, sleep problems, and perceived stress.

#### Limitations

Future research with repeated measures is needed to test the causality of the relationships among variables.

#### Research/Practical Implications

Our findings suggest that work engagement is related to positive consequences (i.e., enhancing job satisfaction and decreasing stress) whereas workaholism is associated with negative consequences (i.e., reducing job satisfaction, increasing stress and sleep problems) for PhD student. Furthermore, our findings provide means to enhance well-being directly (i.e., POS) or indirectly by increasing work engagement (i.e., thanks to PAS) and decreasing workaholism (i.e., thanks to PCS).

#### Originality/Value

To our knowledge, it is the first study to examine the effects of different types of support on both work engagement and workaholism.

### **Moderating effect of personality traits on the relationship between perceived organizational justice and workplace violence intention**

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#### Purpose

The main purpose of this research was to study the moderating effect of personality traits on the relationship between perceived organizational justice and workplace violence intention.

#### Design/Methodology

Research method was descriptive correlational study and statistical population included all employees of a big automotive manufacturer company in Iran, out of them 350 subjects, were randomly selected and three questionnaires consisting of workplace violence intention, organizational justice, and NEO-FFI were used. Data were analyzed with use of simultaneous, moderate and hierarchical regression analysis.

#### Results

The results showed that perceived distributive, procedural and relational justice were able to predict 41% of physical and 34% of verbal workplace violence. Moreover, extraversion and neuroticism along with procedural and relational justice were able to predict 50% of physical and 41% of verbal workplace violence. Furthermore, extraversion and neuroticism moderated the relationship between distributive justice and physical along with verbal violence. Conversely, conscientiousness, openness and agreeableness didn't moderate the relationship between distributive, procedural, and relational justice with physical and verbal violence.

**Limitations**

were based on self reports, is cross-sectional nature that prevents drawing causal conclusions and conducted in automotive manufacturer company that affects generalizability of our findings, thus should be replicated in other settings.

**Research/Practical Implications**

This study hopes to help practitioners and scientists in Industrial and Organizational psychology field.

**Originality/Value**

This research as a first study in workplace violence field in Iran, confirms that workplace violence intention could be decreased by enhancing perceived organizational justice and screening policy in employees' selection process with regards to applicants' personality traits.

**Faculty stress in mozambique**

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**Purpose**

Capacity building projects in developing countries can add to the work load of employees. The current study aims to inform capacity building efforts at a university in Mozambique by studying perceived faculty stress. Literature suggests levels of perceived stress can be predicted by work load, work predictability, and work-life balance. In Africa, income level and fear of budget cuts are important stressors as well.

**Design/Methodology**

A convenience sample of 47 staff members at a university in Mozambique were asked to fill in an online survey. The survey included parts of the Copenhagen Psychosocial Questionnaire, which were translated into Portuguese.

The survey yielded both quantitative and qualitative data. In addition, structured interviews with a five members of staff members were held.

**Results**

Regression analyses showed work pace, work-life conflict, and fear of budget cuts predicted perceived stress. No significant results were obtained for work load, work predictability, and income level. There were no effects of gender on perceived stress and work-life conflict. Qualitative data also showed shortcomings in infrastructure, insufficient opportunities for development and income were perceived as contributing to higher stress levels and work-life conflict.

**Limitations**

The small sample and the fact that survey respondents mostly belonged to a small number of faculties may limit generalizability

**Research/Practical Implications**

Capacity building attempts should make sure training activities do not further exacerbate perceived stress and work-life conflict. Results will help raise awareness and inform future stress intervention measures.

**Originality/Value**

No studies on occupational stress in educational institutions in Mozambique exist.

**Relationships between hospital physicians' working conditions and stress-outcomes**

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**Purpose**

The working conditions of hospital physicians and their impact on psychological wellbeing have been in focus of research for a long time. Several studies proved relationships between

hospital physicians' job stress and aspects of health (e.g., Taylor, Graham, Potts, Richards, & Ramirez, 2005). This study aims to examine such relationships to identify specific work stressors of hospital physicians.

#### Design/Methodology

Data were collected in an online survey in German hospitals. Hospital physicians' working conditions were measured with the short version of the Instrument for Stress-related Job Analysis for Hospital Physicians (ISAK-K; Keller, Bamberg, Kersten, & Nienhaus, submitted). Additionally, several aspects of health were measured, such as burnout and work-related strain.

#### Results

Some significant differences in the perception of working conditions by different medical specialties were proved in a single factor analysis of variance. Additionally, several significant relationships between hospital physicians' working conditions and stress-outcomes were demonstrated in multiple regression analyses.

#### Limitations

At this moment, a causal interpretation of these results is not possible. The findings should be examined in a longitudinal study.

#### Research/Practical Implications

This study proved direct relationships between hospital physicians' working conditions and stress-outcomes. Future research should investigate intervening factors of these relationships, such as career orientation. The results provide approaches for workplace health management in hospitals.

#### Originality/Value

Of particular importance in this study is the specialty-specific approach for improving hospital physicians working conditions.

### **Working conditions and well-being in a European organisation for research. A case study to test stress models**

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#### Purpose

Research about stress and well-being amongst employees is often based on the analysis of negative effects of organisational configurations (Karasek & Theorell, 1990; Siegrist, 1996). However, research must also test specific dimensions of an organisation that, when present, could explain well-being and lower stress. We propose a study conducted inside such a "well-configured" organisation in which relevant dimensions related to the stress and well-being of employees were tested.

#### Design/Methodology

40 employees were interviewed and 1320 completed a questionnaire about job strain, career progression, satisfaction, commitment, effort/reward balance and work/life balance. Other variables include socio-demographic data, professional and organisation status. Additional questions specifically examine the human resources policies and practices of the organisation.

#### Results

Statistical analyses show the positive effects on well-being of specific characteristics of work conditions: autonomy, creative tasks, and level of skills mobilised.

#### Limitations

Established and funded by different European countries this research-oriented organisation is very specific, operates autonomously and must attract the best professionals in Europe.

#### Research/Practical Implications

Despite the specificity of the organisation, results on the dimensions of work organisation and management can be useful to improve well-being in other organisations.

### Originality/Value

To our knowledge, the study is the first based on an organisation that produces “active” (Karasek) employees and a high level of well-being to test conceptual models of stress and well-being.

### Investigating the influence of destructive and transformational leadership on employee wellbeing and job performance

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#### Purpose and Originality

Research on work engagement has consistently found support for the link between employee wellbeing, engagement and leadership (Bakker & Demerouti, 2008; Macey & Schneider, 2008; Tims et al., 2011), with the leader identified as exerting a strong control over the employees' job demands and available resources (Christian et al, 2011; Zhang et al, 2012). However, to our knowledge, research to date has focused on transformational leadership behaviors only, and no study has yet examined destructive leadership behaviors. This research thus investigates the impact of leadership behaviors, i.e., both transformational leadership (Bass & Avolio, 1995) and destructive leadership (Einarsen et al, 2007, Schyns & Schilling, 2012), on employee well-being, with the latter spanning well to unwell (Bakker et al., 2012).

#### Design Methodology

The cross-sectional survey included measures of transformational leadership (Bass & Avolio, 1995), destructive leadership (Aasland et al., 2010), leader-member exchange (Graen & Uhl Bien, 1995) and employee well-being, i.e., work engagement (Schaufeli et al., 2006), job

satisfaction (Cammann et al., 1979), work addiction (Schaufeli et al., 2009), and burnout (Demerouti et al., 2003). Data has been collected from a large Japanese multi-national firm. Preliminary findings show that transformational and destructive leadership behaviours are important contributors of employee well-being.

#### Research/Practical Implications

These findings provide further support for the link between transformational leadership and employee well-being. In addition, the findings extend existing research on leadership and work engagement by also demonstrating the impact of destructive leadership on the well-being of employees. Practical implications for the firm will be discussed.

### LGs' experiences in the Spanish workplaces

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#### Purpose

The aim of this exploratory study is to provide a general picture regarding the workplace experiences of Spanish lesbian and gay (LG) employees, collecting information about factors responsible for, and processes implicated in, situations of discrimination. We focus on the disclosure process that is the process connected with revealing the LG sexual orientation. Past research shows that disclosure is a double-edged sword with positive and/or negative consequences depending on the context where people work.

#### Design/Methodology

32 in-depth interviews with Spanish LG workers were carried out. Participants were recruited through a snowballing approach. In-

interviews were transcribed verbatim and analyzed with the software Atlas.ti.

#### Results

LG employees manage the disclosure process using different strategies, although similarities exist. Some aspects, such as the degree of masculine ethos in the employment sector, characteristics of colleagues, customers or clients, and the perception of a discriminatory work context will influence the way LGs disclose their sexual orientation and its consequences at a personal and an organizational level.

#### Limitations

We lack data from some parts of the country. The participants' level of activism within LG organizations could have affected interviewees' perceptions and discourse.

#### Research/Practical Implications

This study shows the importance of remaining vigilant and preventing and managing every type of behaviour that might be perceived as both blatant and subtle discrimination, in order to preserve both people's well being and job satisfaction, and maintain a healthy organizational climate.

#### Originality/Value

To our concern there are no studies about work discrimination against LGs in Spain, so this work represents an important contribution to overcome the gap in knowledge that exists in this area.

### **Self-efficacy, affect and work engagement in entrepreneurs**

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#### Purpose

Entrepreneurship is a crucial area of study due to its vital importance to national and world's economies. The purpose of the study is to test

how self-efficacy, affect and work engagement reciprocally influence one another.

#### Design/Methodology

A longitudinal study was conducted among a group of 229 entrepreneurs from south-eastern Poland who run their small or medium sized businesses. The Polish versions of following measures were used: General Self-Efficacy Scale, Work Related Affect Scale, Utrecht Work Engagement Scale.

#### Results

Our findings show that self-efficacy relates positively to positive affect and work engagement in case of entrepreneurs. These three variables show reciprocal relationships in longitudinal SEM analyses.

#### Limitations

The limitation of our study is a lack of a representative sample. Further research should be based on a representative group of entrepreneurs taken from a business register.

#### Originality/Value

The value of this research is a three-wave longitudinal design aimed to recognize positive psychology spirals in engagement into entrepreneurial activity.

### **Satisfied if you don't mind, engaged when you care. Positive emotions in relation to work centrality and turnover intention**

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#### Purpose

The affective space of human emotions is considered to be structured by two dimensions: the pleasure vs. displeasure continuum and the degree of arousal. Highly energetic positive states, such as engagement, are distinguished from more passive ones, such as satisfaction. Both can be considered indicators of



employees' well-being. The aim of this study was to investigate whether employees characterized by contrast levels of work centrality and turnover intention, differ with respect to feelings of engagement and satisfaction. We hypothesized that divergent attributes of those two emotions are linked to contrasting causes.

#### Design/Methodology

In order to test this assumption we conducted a study, in which 579 Swedish employees completed a questionnaire measuring positive feelings at work, intention to leave the company and work centrality.

#### Results

Multivariate analyses revealed that the feeling of satisfaction was negatively associated with decision of leaving the job. However, among employees expressing an intention to remain in the organization, highly engaged were primarily those, who considered work as central in their lives.

#### Limitations

Findings refer to a general, overall feelings. It is recommended to check whether differences between satisfaction and engagement hold also on a state level of emotions.

#### Research/Practical Implications

Satisfaction is a sign of reaching an acceptable level of what is expected from a job. However, results suggest that this is not enough to be engaged. Individuals have to highly value their work to feel engaged.

#### Originality/Value

This study explores the difference between two forms of employees' well-being, which is often ignored in work psychology.

### **Team work engagement: Different development patterns over time**

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#### Purpose

Considering the importance of teams in many organizations, some authors started to explore the emergence of work engagement at the team level. Theoretically (Costa, Passos and Bakker, 2012, in press), it implies the dynamic interactions between team members over time. This present paper explores some antecedents that hypothetically differentiate groups with different patterns of team work engagement (TWE) development over time (e.g. identification with the team, interpersonal conflict, interpersonal processes within the team, norms for expressing positive emotions, amongst others).

#### Design/Methodology

With a sample of 764 individuals organized in 167 teams, we performed a cluster analysis to identify the different patterns of TWE's development and a discriminant analysis to grasp the unique contribution of each predictor variable.

#### Results

Teams that show a consistently high or an increasing level of TWE over time are the ones with lower levels of interpersonal conflict and with higher levels of identification with the team and interpersonal processes.

#### Limitations

Data was not collected from teams working in real-life settings but from teams participating in a simulation.

#### Research/Practical Implications

Our results show that a specific combination of variables enhances the likelihood of the emergence of TWE within teams and that those variables tend to have an affective nature. This implies that researchers and practitioners alike must pay attention to the affective dynamics of team members in order to

boost team effectiveness and employee well-being.

#### Originality/Value

To our knowledge, this is the first study to analyze patterns of development of work engagement over time, in teams.

### **The role of regulatory fit in employee engagement**

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#### Purpose

This study relates work engagement, a positive state of pleasure, energy and dedication, to regulatory fit. Promotion-oriented employees are focused on growth and fulfilling their ideals, while prevention-oriented employees are focused on safety and fulfilling obligations. Similarly, organizations can focus on development (promotion) or responsibilities (prevention). Regulatory fit occurs when employee and organizational orientations correspond.

We hypothesise that work engagement will be higher when regulatory fit occurs. Further, we hypothesise that regulatory fit strengthens the positive relation between job resources (autonomy and social support) and work engagement.

#### Design/Methodology

An online survey among Flemish employees ( $n = 263$ ) was performed.

#### Results

Hierarchical regression analyses revealed support for a positive main effect of regulatory fit on work engagement. Further, regulatory fit strengthened the positive relation between autonomy and work engagement. No such interaction effect was found for social support.

#### Limitations

Key limitations of this study are its cross-sectional nature and reliance on self-report measures. In addition, a convenience sample of employees was used.

#### Research/Practical Implications

Results show that regulatory fit is associated with enhanced work engagement. Moreover, results indicated that employees benefit from having high autonomy, mainly while experiencing congruence between their individual and the organizational regulatory focus. Workplace interventions can shape selection procedures or internal communication in order to achieve regulatory fit.

#### Originality/Value

The effects of the regulatory focus of employees on work engagement has been studied before. This study adds to this literature by including the concept of congruence between regulatory focus of employees and organizations.

### **Trait emotional intelligence, approach motivation and work engagement in Hong Kong teachers**

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#### Purpose

Work engagement is understood to be an important factor influencing the well-being of employees. Whilst previous studies of work engagement have shown that this is influenced by various characteristics about the job itself (e.g. job resources), less is known about how work engagement varies with individual characteristics. Building on trait emotional intelligence theory (trait EI) as a personality construct, we incrementally tested whether trait EI predicts variance in work engagement over previously found personality predictors such as core self-evaluations and Big-Five vari-

ables. A second aim was to test whether approach motivation account for the indirect effects of trait EI on work engagement.

#### Design/Methodology

Using a cross-sectional self-report survey, we examined relationships between trait EI, approach motivation and work engagement in a sample of Hong Kong school teachers (N = 211) after personality (CSE, Big-Five variables) and background variables (e.g. gender) were statistically controlled.

#### Results

Hierarchical regression and bootstrapping analysis for testing the incremental and mediational hypotheses confirmed both assumptions.

#### Limitations

Self-report measures suffer from common method variance. Additionally, causality cannot be inferred due to cross-sectional character of this study.

#### Research/Practical Implications

Similar to a growing number of empirical studies showing dispositional effects on work engagement, findings suggest that trait EI add to the prediction of work engagement afforded by personality. Trait EI exerts its influence on work engagement in part through approach motivation.

#### Originality/Value

First study to test incremental validity of trait EI on work engagement and its underlying mechanism in an Asian teacher sample.

### **Measuring happiness in the workplace: Are engagement at work and well-being equivalent?**

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#### Purpose

In organizational research, engagement at work and well-being are terms often used interchangeably. However, despite some theoretical similitudes, Robertson and Cooper (2010) proposed that well-being and engagement could actually be different concepts. To date, the nature of the relationship between the two concepts has not been investigated empirically. In order to address this limitation, we conducted a study in which we hypothesized that engagement at work and well-being are two related but distinct constructs.

#### Design/Methodology

772 Quebec workers from the health sector answered a self-reported questionnaire on measures of work engagement and different measures of well-being (general psychological well-being and well-being at work). In order to test our hypothesis, we performed a series of exploratory factor analyses and inter-factor correlations.

#### Results

Preliminary results reveal that the measured indicators loaded on three factors, corresponding respectively to engagement, well-being in general and well-being at work (65.44% of explained variance). Inter-factor correlations between the three factors are moderate to large ( $.26 \leq r \leq .56$ ). The results supported our hypothesis that work engagement and psychological well-being are related but distinct constructs.

#### Limitations

This study was based on cross-sectional and self-reported data. Replication with other populations of workers is also needed.

#### Research/Practical Implications

Researchers should carefully choose their theoretical framework when using measures of work engagement or well-being, as the two concepts are not equivalent.

**Originality/Value**

To our knowledge, this study is the first to examine empirically the relationship between well-being and engagement at work.

**Effects of psychosocial resources and coping on work engagement and health: A new model**

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**Purpose**

The model of psychosocial resources (Taylor & Broffman, 2011) was combined with the Job Demands-Resources model. The integrative model hypothesizes that health and work engagement are predicted by psychosocial resources, with coping processes as mediators. The present study tested this model. Next to "traditional" resources (optimism, self-esteem, social support) effects of authenticity, purpose-in-life, and personal/social identity were studied.

**Design/Methodology**

Participants (N = 117) filled out online questionnaires measuring demographic data, health complaints (psychological, physical, somatic, burnout complaints), work engagement, approach- and avoidance related coping. All scales had high reliability. Hypotheses were tested with hierarchical multiple regression and mediator analyses.

**Results**

In general, the model stood its test well. With the exception of identity, psychosocial resources predicted health and work engagement. Purpose in life predicted work engagement and burnout strongly; authenticity had sizeable relations with health. Personal identity related positively to approach-coping, social identity related negatively with approach-coping but positively with avoidance. Approach-coping related only to work engage-

ment and did not mediate the effects of psychosocial predictors. Optimism, self-esteem, authenticity and purpose predicted less use of avoidance; apparently, this reduced health complaints.

**Limitations**

The cross-sectional design prevents strong conclusions about causality. Self-report measures could create common-method variance.

**Research/Practical Implications**

New interventions may lead to better health.

**Originality/Value**

This study adds to the knowledge of effects of non-traditional psychosocial resources.

### 3. Health and interventions

#### Symposia

#### Occupational Health and Safety: Leadership as the Key to Success for a Healthy Organization

Session Chairs: *Ruediger Manfred Trimpop (Univ. of Jena) [ruediger.trimpop@uni-jena.de](mailto:ruediger.trimpop@uni-jena.de), Ilona, Patricia Kryl (International Institute of work, health and traffic) [kryl@kryl.org](mailto:kryl@kryl.org)*

Healthy organisations need healthy leadership. Both research and practice interventions support this notion yet very often interventions are not validated and research does not consider realistic limitations and chance of healthy leadership. We want to tackle this problem both with sound research, experience and hands-on training.

In this session we have scientists and practitioners of the following institutions:

University of Jena, Germany, University St.Gallen, Switzerland

German Traffic Safety Council, Bonn, System-concept, Cologne, DGUV (Mandatory German Social Accident Insurance), Berlin; International Institute of work, health and traffic, Schwelm.

We intend to address the issue of “healthy leadership” or leadership for health from a theoretical foundation, leading to empirically evaluated interventions and to practical lessons learned. All presenters and trainers are both working as consultants in practice as well as researchers.

We will utilize the common concepts of human-centered transformational leadership, present the results of 2000 safety practitioners as to their effectiveness, demonstrate an evaluated leadership-intervention tool in traffic safety, address health-promotion studies in profit and non-profit organizations. We will utilize: coaching for leaders, traffic-safety interventions for leadership; participative leadership methods to improve health on the job, designing systems interventions for innovation, transformational leadership and health-promotion.

#### ***Presentations of the Symposium***

#### **Participative interventions to install a sense of responsibility for health in leaders**

*Rüdiger Manfred Trimpop (Univ. of Jena) [ruediger.trimpop@uni-jena.de](mailto:ruediger.trimpop@uni-jena.de), Nadja Kreutzer (Univ. of Jena)*

##### **Purpose**

Studies and interventions in health promotion show mixed success of these measures. One reason is, that managers have often been not included into such measures. Furthermore, suggestions that are put forward in the health-promotion process, e.g. through health-circles, were not planned and introduced as an integrated component of work procedures but rather as an additional task. Furthermore, health as a leadership issue and tools for introducing leadership health values are often not explicitly defined. The purpose of this presentation is to involve the scientists, practitioners and participants into health related leadership tools in practical terms.

Examples from the leadership health-circle data and qualitative experiences of support and hindrance processes from several projects will be presented to the whole workshop and then discussed with one group of the participants in a 60 minute scientists meet practice

tioners discussion. Common results are being presented to the whole group.

We expect the knowledge both theoretically based as well as hands-on of all participants will be greatly increased. Also, important design information for running such leadership-circles will be exchanged and discussed so that both research as well as practice will profit.

Methods can vary between organizational cultures and thus the generalizability is dependent upon real-life circumstances.

#### Research/Practical Implications

Ropes to know and ropes to skip in leading managers to health-promotion will benefit.

#### Originality/Value

Scientist-practitioner hands-on information with the chance to profit from experiences in several comparable large scale promotion processes will help both the researcher as well as the practitioner.

### **Lessons learned from 2000 safety practitioners and 400 managers: Effective approaches to improve safety through leadership**

*Rüdiger Manfred Trimpop (Univ. of Jena) [ruediger.trimpop@uni-jena.de](mailto:ruediger.trimpop@uni-jena.de), Tobias Ruttke (Univ. of Jena), Werner Hamacher (Systemkonzept), Ulrich Winterfeld (DGUV)*

#### Purpose

The Sifa (Safety-expert)-Longitudinalstudy examined over 8 years more than 2000 safety practitioners and more than 400 managers, work doctors and shop stewards as to their estimates of safety and preventive activities and effectiveness. We want to present the findings especially related to the important role of leadership in furthering health and safety issues.

#### Design/Methodology

2000 safety practitioners in Germany were asked 3 times over 8 years about their behavior, effectiveness and attitudes as well as motivations for their occupational safety work. Empirical data were gathered of virtually all conditions and activities of preventive safety and health action in a longitudinal design.

#### Results

15 factors were identified ranging from economic situations, through safety culture, personal abilities and attitudes to activities motivations and effectiveness of occupational safety experts. Data show that and how the effectiveness of occupational safety practitioners is greatly enhanced. It is shown that if the legally required opportunity for them to address the top managers directly is not provided, their effectiveness drops significantly. Company benefit data of human-centered work design or psychological well being show that all occupational groups see a strong connection between these factors and the performance of the organizations with top managers reporting the strongest correlations ( $r=0,76-0,82$ ).

#### Limitations

No on the job observations could be assessed.

#### Research/Practical Implications

Data show what, how and who can promote health and safety effectiveness.

#### Originality/Value

No study ever has followed a whole professional safety group from receiving their licences and validated the estimates given through other company personnel.



### **Organizational support, leadership and barriers of successful occupational traffic safety work**

Alexander Danne (Univ. of Jena) [alexander.danne@uni-jena.de](mailto:alexander.danne@uni-jena.de), Sebastian Wirtz (DVR), Rüdiger Manfred Trimpop (Univ. of Jena)

#### **Purpose**

In addition to the responsibility of the employer each individual has to act safety-oriented, especially in traffic safety. In traffic safety circles solutions to problems in driving behavior are collected, discussed and developed by the employees. Our purpose was to identify obstacles and supporting factors within the organization and the circle group. Based on Trimpop et al. (1999) we stated that leadership is a relevant factor and explored additionally the effect of combinations of leadership and other factors.

#### **Design/Methodology**

In a pre-post design and a process evaluation we gathered data from 673 participants of three municipal organizations and 172 participants of a petro-chemical company, 33 focus interviews and 32 process evaluation interviews were performed and transformed in effect networks.

#### **Results**

The influential role of leadership is supported by the results of the analyses of qualitative and quantitative data, though the influence differs between different organizations. Depending on the particular effect either the network, or the specific organization or further factors related to the identified safety problem or suggested intervention became relevant as well.

#### **Limitations**

No causal deductions are possible, due to missing control groups.

#### **Research/Practical Implications**

The mix of a qualitative and a quantitative approach explored the combinations with

leadership of successful safety work and afforded a specific, organization centered advancement for future.

#### **Originality/Value**

Our approach is the first to compare traffic-circle behavior and leadership actions in changing safety conditions. Hindrance and supportive factors, especially those related to leadership can be transferred into many other organizational change processes.

### **Innovation through transformation: Methods to build a healthy organisation**

Andreas M. Krafft (Univ. St. Gallen) [andreas.krafft@bluewin.ch](mailto:andreas.krafft@bluewin.ch)

#### **Purpose**

Innovation is one of the most important issues for an organization to stay up to date and improve its performance, products and customer relationship.

Yet, just changing everything does not in itself mean that improvement will result. Constant change can also lead to reduced health and motivation. Some key components to combine innovation processes with health are stability in core values, sense of coherence, personal importance, and effort-reward perceptions.

Experiences from business consulting and research are combined in this presentation to support managers and consultants with knowledge and tools to run innovation processes more successfully.

#### **Design/Methodology**

The key role of the core concepts of leadership-health and innovation are presented in a 5 minute-presentation to the whole audience. Then a subgroup will discuss and clarify those processes and support tools in a small group that have been proven to be successful both in practice as well as in evaluations.

### Results

Consultants and managers need to consider personal values and health-issues, especially psychological concepts, such as sense of coherence, when introducing innovations that are aimed at long-term effectiveness.

### Limitations

Innovation and health have not been studied in controlled longitudinal studies yet, so that the results and predictions need to be validated more in the future.

### Research/Practical Implications

Health and innovation can go hand in hand. Methods for consultants and managers will be applicable after the workshop.

### Originality/Value

Innovation is perceived under an important, yet largely neglected perspective of health. Both scientists and practitioners can greatly benefit from each others insights

## **The management of innovations and personal well-being**

Andreas M. Krafft (Univ. St. Gallen)  
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### Purpose

The purpose of this paper is to introduce a conceptual framework, which links innovation with the personal sense of well-being of managers. Reverting to Antonovsky's Salutogenic model we argue, that the sense of coherence is a general phenomenon, which helps people – especially managers – to cope with complexity, handling challenges and leading innovation processes more smoothly while at the same time improving their sense of well-being.

### Design/Methodology

Data from three quantitative research studies among more than 300 managers was analyzed with SPSS and AMOS in four steps: 1. Explorative factor analysis and reliability tests; 2. re-

gression analysis; 3. structural equation modeling; and 4. post-hoc analysis of sub-groups.

### Results

The overall commitment to an innovation strategy depends primarily on the quality of the management processes for innovation. The sense of coherence and the perception of the quality of management processes for innovation are mutually interdependent. The perceived quality of the innovation strategy predicts the perceived innovation success and the sense of coherence correlates with the perceived personal well-being.

### Research/Practical Implications

The empirical data supported the assumption, that the innovation capacity of managers emerges from the mutual influence of the directly experienced management processes for innovation and the sense of coherence as perceived by the respondents.

### Originality/Value

Instead of speaking about how to overcome resistance the focus has been shifted to foster a positive attitude towards innovation by promoting psychological well-being.

## **Sense of coherence as a key to occupational health: Coaching tools to improve leadership**

Ilona Patricia Kryl (International Institute for work, health and traffic) [kryl@kryl.org](mailto:kryl@kryl.org)

### Purpose

Time pressure, increasing responsibility, frequent adaptations to new technologies, a rising influence of global or natural processes become more and more straining to people at work. They often neglect their own mental and physical health and that of their employees. Health care expenses for burnout or other mental and psychosomatic disorders rank higher every year. Many managers use business coaching as one way to deal with these

challenges at work. Antonovsky's sense of coherence scale serves as a good basis to strengthen the role of mental and physical health in managers' lives and leadership behaviour.

This presentation provides an insight into applying scientific findings about the sense of coherence to practice, in particular to coaching managers.

The key-statements will be presented for 5 minutes to the whole workshop and then discussed with one group of the participants in a 60 minute scientists meet practitioners discussion. Common results are being presented to the whole group.

Practical examples will be depicted. Successful coaching tools will be introduced. Participants will have a chance to make personal experiences with a selection of tools.

#### Originality/Value

The special format of this session offers the rare opportunity to go the whole way from scientific findings to application in practice to personal experience.

### **Trainings and interventions for occupational traffic safety and their usefulness for leadership**

Jochen Lau (DVR) [jlau@dvr.de](mailto:jlau@dvr.de), Gudrun Gericke (Univ. of Jena), Juliane Schupa (Univ. of Jena)

#### Purpose

Although more than 50% of all fatal accidents in industry happen related to occupational traffic, relatively little attention focuses on these events. The DVR (German traffic-safety council) and the University of Jena have run studies identifying driving hazards and interventions. Safety practitioners and managers argue that accidents happen outside company boundaries and therefore they are incapable of preventing them. We present - based on our data bank of more than 600 measures-

those that are especially effective for managers and those that need increased leadership support to make them effective.

#### Design/Methodology

Examples from the data bank of more than 600 are being presented in a 5 minute presentation to the whole workshop and are then being discussed with one group of the participants in a 60 minute scientist meets practitioners discussion. Common results are being presented.

#### Results

We expect the knowledge both theoretically based as well as hands-on of all participants will be greatly increased and the curiosity about further methods will be raised, so that both research as well as interventions for traffic safety will be increased.

#### Limitations

The session can not be run with a large group (more than 15) people.

#### Research/Practical Implications

With better interventions and more knowledge about support, companies and multipliers alike can work more effectively at the reduction of the large number of fatal and other occupational traffic accidents.

#### Originality/Value

Scientists and practitioners often only have to listen each other, here they can exchange hands-on knowledge with experts and utilize helpful tools.

## Health literacy as a key-concept for leadership on health and safety

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### Purpose

Within the last decade, health literacy has become a central concept in health promotion. Thereby it remained vague, which competencies contribute to the concept. A recent model-building resulted in a structure model on health literacy at the level of key competencies (Sollner et al., 2010, Lenartz 2012). As competencies are regarded as context-specific, the model needs to be transferred into concrete organizational contexts. Then, health literacy promises to offer vast implications on leadership for health and safety within organization.

### Design

Relying on the health literacy model, a two-stage Delphi-survey was conducted. Experts came from different disciplines in health, social science, technicians, and medicine. The first wave (N = 15) sampled context-specific skills and abilities related to the key competencies of the model. The second wave (N = 44) rated these competencies on two dimensions: importance for employees' health; availability by employees.

### Results

A set of competencies operationalised the health literacy model for organizational settings. Ratings implicate that employee's don't have these competencies at a sufficient level. Implications for leadership highlight especially the need to support employees' self-regulation on health, including their self-perception and self-control, on all levels of leadership and labor-organization.

### Limitations

Conclusions of this study rely mainly on expert-ratings and theoretical arguing. Empirical studies need to follow.

### Discussion

The results highlight the need to foster employee's health literacy within organizations and gives hints on how to do so.

To our knowledge, this study is the first to systematically draw conclusions from the concept of health literacy on leadership behavior.

## Promoting Work Ability and Health in Nursing

Session Chairs: Juergen Wegge (TU Dresden)

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### State of the Art

This symposium brings together researchers from four different countries (Germany, Switzerland, Austria and Denmark) and a variety of institutions. The purpose is to provide first a theoretical introduction into the determinants of work ability and health in the context of nursing and then to present new empirical evidence regarding the most important factors that help to improve work ability and health in nurses.

### New Perspective/Contribution

In the first paper, Schrod et al. present evidence from a longitudinal study with 50 geriatric care institutions confirming positive relations between objectively well designed work and health. The next two presentations are based on the same research project (ODEM) and provide evidence of a stress buffering role of a positive age climate in work teams ((Bilinska & Wegge) and prospective memory (Kliegel et al.). The fourth presentation by

Glaser and Hornung discusses relations between different stressors and burnout in four different fields of nursing. Finally, Brom et al. and Jeppesen and Jonsson present results from field studies in which the role of emotional regulation and self-efficacy beliefs are investigated

#### Conclusion and Implications for Research/Practice

Overall, the six presentations confirm that objective work organization, age climate, emotion regulation strategies, leadership and executive functions are central determinants of well-being and performance in nursing. The symposium combines a range of different approaches (cross-sectional and longitudinal designs) and dependent variables (general well-being, burnout and work ability measures) and therefore provides an innovative, multi-perspective view on the determinants of work motivation and health in nursing.

### ***Presentations of the Symposium***

#### **Impact of work organization and task characteristics on strain and turnover in geriatric care**

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#### Purpose

The demographic change in Germany shows a twofold impact on the geriatric care: While the number of high-maintenance people rises, the average age of nurses rises as well. At the same time, it has become harder to recruit new sufficient qualified trainees for this kind of nursing. Furthermore, numerous studies emphasize high physical and mental strain and increasing time pressure, the main reasons for high rates of sickness and turnover. Thus, the

stabilization of health and workability of employees in geriatric care is indispensable. The aim of this study is to examine, whether work organization and task characteristics according to the criteria of well-designed work (DIN EN ISO 6385, 2004; DIN EN ISO 10075, 2000) may reduce strain and prevent turnover.

#### Design

In a longitudinal study (ODEM) in geriatric care institutions (n= 50) different aspects of task and work organization (e.g. work schedule, task control, task variety) were analyzed with a multi-source criteria-oriented instrument by work psychologists at t1. Additionally, qualified nurses were interviewed concerning perceived strain (e.g. recovery, detachment, emotional exhaustion).

#### Results

The care units differ in their patterns of work organization. Well-designed work is associated with lower perceived strain and lower turnover.

#### Practical Implications

The study confirms the relationship between the criteria of work design and perceived strain as well as enhanced organizational commitment for the specific conditions of geriatric care. Work re-design according to these criteria may be useful to cope with the consequences of demographic change in the German geriatric care.

#### **When age is valued: The role of organizational age climate and age differentiated leadership in keeping nurses healthy**

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#### Purpose

Due to the demographic change in western societies organizations are facing more and more age diverse work teams. Work groups with high age diversity, however, often report

low work satisfaction, communication and show higher turnover rates. Thus, we should investigate how young and old can work together effectively and stay healthy. Whereas previously research focused on individual level factors (age stereotyping and ageism) little is known about the influence of organizational characteristics (climate, leadership and culture). Therefore, the present study investigated the role of organizational age climate and age differentiated leadership on various health (wellbeing, workability, burnout) and turnover related indicators (identification) in the field of nursing.

#### Design

Data from 50 nursing homes that participate in a longitudinal study (ODEM) was analyzed at t1 using hierarchical modeling. Employees' (N= 400) self reports included ratings on wellbeing, work ability, organizational identification and turnover intention as well as their and their supervisor's (N= 90) perceptions of psychological age climate (PACS) and age oriented leadership.

#### Results

Organizational age climate was positively associated with organizational identification and negatively associated with turnover intention even after controlling for nurses' psychological age climate ratings on level one. Further, age differentiated leadership and organizational age climate was negatively associated with employees' emotional exhaustion.

#### Limitations and Practical Implications

The results stress the importance of organizational age climate and age oriented leadership in dealing with age diverse staff. We report data on the stability and causality of the relationships at the conference (t2 is finished at this time).

### **The role of cognitive resources in predicting work ability and health**

*Andreas Ihle (Univ. de Genève) [Andreas.Ihle@unige.ch](mailto:Andreas.Ihle@unige.ch), Marlen Rahnfeld (TU Dresden), Sandrine Müller (TU Dresden), Matthias Kliegel (Univ. de Genève)*

#### Purpose

The aim of the present study was to examine the impact of cognitive resources on predicting work ability and health in older nurses. Cognitive resources such as multitasking, planning, inhibition of inappropriate responses or memory for delayed intentions (i.e., prospective memory) are frequently required for successfully managing the daily challenges in health care settings. However, there is little empirical research on the role of individual differences in cognitive functioning for predicting work ability and health in general and in particular with respect to the aging work force.

#### Design/Methodology

Current analyses use the ODEM sample, an ongoing research project in which at present about 300 nurses and their work contexts have been studied. Besides examination of organizational and psychosocial variables, health and work ability, participants are undergoing an individual cognitive examination testing memory, executive functions, attention, speed, fluid and crystallized intelligence etc.

#### Results

Data collection is ongoing, but first results suggest that especially executive functions and prospective memory may be key predictors for work ability and health in the aging work force.

#### Limitations

Current results are limited by the ongoing data collection. The study itself has a correlational design preventing any causal conclusions.



### Research/Practical Implications

Results have implications for models and intervention programs for the aging workforce in general and in health care setting in particular, as the role of cognitive resources largely underspecified.

### Originality/Value

The study is unique in this research context in examining a fine-grained and theory-based architecture of cognitive resources.

### **Challenge and hindrance stressors in different fields of nursing – the role of resources, and relationships to psychological detachment and burnout**

Jürgen Glaser (Univ. of Innsbruck) [juergen.glaser@uibk.ac.at](mailto:juergen.glaser@uibk.ac.at), Severin Hornung (Polytechnical Univ. Hongkong)

### Purpose

Against the background of ageing Western countries, demands for nursing services will further increase while workforces grow older. Building on action theory, demand-resources model and challenge/hindrance stressors, we hypothesized differences of job characteristics between fields of nursing and relationships with detachment and burnout.

### Design/Methodology

Multi-sample studies in four fields of nursing were conducted. The overall sample subsumes N=485 (5 general hospitals), N=1.848 (111 homes for elderly), N=721 (97 ambulant nursing services), and N=2.141 (10 psychiatric hospitals). Job characteristics were assessed by Screening TAA, in particular, skill variety (challenge demand), autonomy (task-related resource), and work overload (hindrance demand). Psychological detachment and burnout were assessed by Irritation scale and MBI-D. Relationships are examined by means of SEM (controls: age, gender, fields of nursing).

### Results and limitations

Job characteristics differ between fields of nursing. CFA confirm the distinction between challenge and hindrance stressors. Skill variety is positively related to cognitive irritation, work-overload negatively related to emotional irritation and burnout. We found evidence for a moderating effect of autonomy. Emotional irritation is shown to be mediator of the hindrance stressor – burnout relation. Model fits substantiate patterns across fields of nursing. Cross-sectional results have to be underpinned longitudinally.

### Implications/Originality

Results suggest generalizability of model assumptions and offer hints for preventing psychomental impairment through job design. Odds between nursing fields indicate ways to create individualized career paths with respect to workability. The study is the first to examine differences of job characteristics between fields of nursing and their relationships to detachment and burnout.

### **When helpers need help: Development of work-related low back pain in the elderly care field**

Sarah Brom (TU Dresden) [brom@psychologie.tu-dresden.de](mailto:brom@psychologie.tu-dresden.de), Gabriele Buruck (TU Dresden), Iren Horvath (TU Dresden), Peter Richter (TU Dresden)

### Purpose

Workers in the profession of elderly nursing are experiencing increasing demands due to demographic changes of the population. High job demands and high job strain cause high absenteeism and early retirement. Chronic low back pain is also a frequent result in this context. The aim of this study is to describe the development of chronic non-specific work-related back pain and to determine the role of workload, burnout and emotional regulation.

### Design/Methodology

To investigate the development of work-related back pain, a longitudinal design with

four measurement points was used. Currently, data is available from two measurement points. Data was collected using self-reports targeting six areas of work life, emotional exhaustion, depersonalization, inefficacy, acceptance and self-support (N=220, drop-out: 30 %).

#### Results

Regression analyses showed that poor work factors significantly impaired chronic low back pain. The long-term effects of working conditions on the emergence of back pain were confirmed. Burnout and emotional regulation were identified as mediators (moderators) of the relationship between working conditions and back pain.

#### Limitations

Confirmation of the long-term effects across all four times of measurement is not possible yet. Moreover, most of the measures were subjective assessments made by participants.

#### Research/Practical Implications

Working conditions as well as individual factors have an important influence on the development of chronic non-specific back pain. Therefore, prevention programs should target behavioral and organizational interventions.

#### Originality/Value

To our knowledge, there are only few studies that have investigated the combined influence of burnout and emotion regulation on back pain using a longitudinal research design.

### **The importance of efficacy beliefs regarding participation and the role of well-being during organizational merger in a large hospital**

*Hans Jeppe Jeppesen (Aarhus Univ.)  
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#### Purpose

High self-efficacy has been shown to facilitate involvement in challenges (e.g. organizational

change) and to improve performance in organizations. Preliminary results further indicate that this may also be the case for organizational efficacy and proxy efficacy to different organizational agents (e.g., work teams, work councils). In this study we focus on the question if the various forms of efficacy have the same importance for employees' organizational participation during a large merger process and if the level of well-being plays a moderating role for this interaction.

#### Methodology

The study is conducted at a big regional hospital in Denmark encompassing all of the around 4800 employees. The data will be collected via documentary material and through questionnaires. In addition to demographic data, scales concerning the different forms of efficacy, participation, involvement in leadership and questions on well-being and satisfaction will be applied. The study is longitudinal, but the first data collection will take place in October 2012 which offers us opportunities to present results from these data.

#### Results

The strategies of analyses to be presented will include the importance of age, education, work function, and seniority for the forms and levels of efficacy and participation. Regression analyses will provide results concerning the expected role of well-being and satisfaction as moderators for these findings.

#### Originality / Value

This field study will provide new results on the interaction of efficacy forms and well-being during a process of organizational challenges and connected intervening variables in health care organizations.

## Positive Occupational Health Psychology Interventions: Effects of Person and Job Level Interventions on Personal Resources, Well-being and Work Engagement

Session Chairs: *Annekatriin Hoppe (Humboldt Univ. Berlin, DE) [annekatrin.hoppe@hu-berlin.de](mailto:annekatrin.hoppe@hu-berlin.de), Alexandra Michel (Heidelberg Univ., DE) [alexandra.michel@psychologie.uni-heidelberg.de](mailto:alexandra.michel@psychologie.uni-heidelberg.de)*

Facilitator: *Eva Demerouti (Eindhoven Univ. of Technology) [e.demerouti@tue.nl](mailto:e.demerouti@tue.nl)*

### State of the art

Over the last decade, positive psychology has inspired theory building in occupational health psychology (Bakker & Demerouti, 2007). Furthermore, occupational health psychologists have drawn from positive psychology intervention research (Sin & Lyubomirsky, 2009) in designing work-related interventions.

### New Perspective/Contribution

The aim of this symposium is to present and discuss person and job level positive occupational health psychology interventions that aim to improve employee well-being. The first three papers present findings from person level positive interventions aiming to enhance employees' personal resources, well-being and work engagement. In the first paper, Ouwenneel, LeBlanc and Schaufeli discuss effects of an online intervention for improving positive emotions and work engagement. Second, Michel, González-Morales, Hoppe, O'Shea and Steidle show effects of three positive person-level interventions in promoting personal resources and satisfaction among administrative staff. Third, in a quasi-experimental field study Keane and O'Shea present findings and discuss limitations of a gratitude intervention in the work context. In taking a job level perspective, Steidle and Werth discuss how job design interventions

that target changes in illumination at work may positively affect employee health and well-being over and above person level interventions.

### Conclusion and Implications for Research/Practice

The findings of the studies will stimulate the discussion around the quality and benefit of person level positive interventions along with their limitations arising from weak effects. Our discussant, Eva Demerouti, will integrate the findings of all four studies and present future directions for intervention research in the field of positive occupational health psychology.

## ***Presentations of the Symposium***

### **Conducting individual positive interventions to promote engagement at work: Lessons learned**

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#### Purpose

The emergence of positive organizational psychology has paved the way for interventions that enhance work-related well-being at a population level. According to Broaden-and-Build theory, the experience of positive emotions helps to build resources (such as self-efficacy), which, in turn, may lead to a more enduring positive state like work engagement.

#### Design/Methodology

We designed an on-line training to intervene in this individual "building process" towards work engagement. The program consisted of three types of online assignments: happiness assignments to stimulate positive emotions, goal setting assignments, and resource building assignments. We hypothesized that this self-enhancement training would enhance work engagement in comparison with a self-monitoring control condition.

### Results

The results showed that the self-enhancement program had a significant positive effect on antecedents of engagement (i.e., positive emotions and self-efficacy) compared to the self-monitoring group, but not on engagement itself, at least, not at first glance. However, additional analyses showed that the positive effects of the self-enhancement program *do* exist among employees who are low in engagement at pre measurement, but not among employees who are medium or high in engagement. Although those participants low in engagement have the most benefit from the intervention, we also found that they are more likely to drop out of the intervention.

### Research/Practical implications

Hence, a paradox arises which we dubbed the Selection Benefit Paradox. Therefore, when conducting individual positive interventions, it seems to be an important challenge to make employees low in engagement enthusiastic about starting and finishing individual positive interventions.

### Looking at the bright side of work: Person-level interventions that foster employee optimism and satisfaction

Alexandra Michel (Univ. of Heidelberg) [alexandra.michel@psychologie.uni-heidelberg.de](mailto:alexandra.michel@psychologie.uni-heidelberg.de),  
Gloria González-Morales (Univ. of Guelph),  
Annekatriin Hoppe (Humboldt Univ. Berlin), Deirdre O'Shea (Univ. of Limerick), Anna Steidle (Univ. of Stuttgart)

### Purpose

In line with positive psychology (Seligman & Csikszentmihalyi, 2000) and the assumptions of broaden-and-build-theory (Fredrickson, 1998) occupational health psychologists have recently started to design interventions that positively influence employees' well-being. The aim of this study is to transfer positive psychology interventions to the work context and to evaluate their effects on employees'

personal resources (i.e., optimism and hope) and satisfaction (i.e., life and job satisfaction).

### Design/Methodology

We used a randomized controlled design with three intervention groups and a waiting control group (N=60). In the intervention groups participants were asked to focus during work hours on (Group 1) one positive thing at work, (Group 2) an act of kindness performed at work or (Group 3) to positively reappraise a negative work event.

### Results

ANOVAs with repeated measures across the four groups revealed no direct effects of time. That is, in general the interventions did not improve personal resources or satisfaction at Time 2. However, when stratifying the sample into low and high at risk groups according to their levels of social support, we find that the interventions increase optimism as well as job and life satisfaction for those employees experiencing low levels of social support.

### Research/Practical Implications

We will discuss how positive occupational health psychology interventions are particularly helpful for vulnerable employees with insufficient resources.

### Originality/Value

Our results support the restoration and conservation assumption which suggests that positive interventions are beneficial to restore depleted resources.

### Investigating the effectiveness of a daily gratitude intervention in the workplace

Deirdre O'Shea (Univ. of Limerick) [Deirdre.OShea@ul.ie](mailto:Deirdre.OShea@ul.ie), Fiona Keane (Univ. of Limerick)

### Purpose

This research investigated the effectiveness of a gratitude intervention to enhance work-

related well-being over a two-week quasi-experimental study.

#### Design and Methodology

Two employee groups from one company wrote about a work-based event that they were grateful for over two weeks. The first group completed the intervention daily for 10 working days, while the second completed it twice per week. Participants completed a questionnaire prior to, and following completion of, the intervention. 79.2% were female, with an age range of 22-48 years (mean = 30.68; Sd = 6.91), and worked 40 hours per week (Sd = 4.56).

#### Results

Contrary to expectations, there were no differences between the two groups regarding changes in gratitude, work engagement, burnout or job satisfaction after controlling for age, gender, hours worked and pre-intervention levels of work characteristics, mindfulness and ability to savour. No significant differences were found between the pre- and post-levels of gratitude, work engagement, burnout and job satisfaction for either group.

#### Limitations

Sample size limited the generalizability of the results, and future research will need to investigate further occupations and organizational settings.

#### Research and Practical Implications

The participants demonstrated high levels of well-being prior to commencing the intervention, and it may be that such interventions are more effective for employees with lower levels of well-being. Findings are discussed in the context of emerging research on positive psychology interventions in the work context.

#### Originality/Value

Little prior research has investigated the effectiveness of gratitude interventions in the work

context, particularly using a quasi-experimental methodology.

### **Shedding light on the potential of positive occupational health interventions in the physical environment: Illustrated by a meta-analysis on illumination**

*Anna Steidle (Univ. of Stuttgart) [anna.steidle@people-inside.de](mailto:anna.steidle@people-inside.de), Lioba Werth (Univ. of Hohenheim)*

#### State of the Art

Over the last decade, positive psychology has inspired new research, models, and interventions in occupational health psychology. The current accounts describe the positive impact of fostering personal and social resources but largely neglect the role of the physical environment in which the daily work life takes place (e.g., Bakker & Demerouti, 2007; Sin & Lyubomirsky, 2009).

#### New Perspective/Contribution

We therefore propose that it is time for positive occupational health psychology to acknowledge the positive, restorative potential of the physical environment and to integrate it into their range of resources. Extensive research has shown that the physical environment provides resources above and beyond personal and social resources (e.g., Bringslimark, Hartig, & Patil, 2009; Cajochen, 2007; Kaplan, 2001).

#### Research/Practical Implications

Building on the results of a recent meta-analyses (Steidle, Zill, Werth, & Sedlbauer, under review), the presentation outlines two ways how physical environment interventions, specifically lighting interventions, can increase occupational health and work performance: Providing illumination which (1) helps users to optimally perform their work and offers resources to meet task-related and situation demands (e.g., alerting bright light during night shifts) and (2) satisfies needs closely



related to environmental design and workspace layout (e.g., privacy, control). Potential practical interventions, their limitations, and investigation will be discussed.

#### Originality/Value

The physical environment in organizations has a positive, restorative potential which has been neglected by positive occupational health psychology. The presentation strives to shed light on the advantages and limitations of two types of positive physical environment interventions.

## Take Care! Promoting the Health and Well Being of Health Care Staff

Session Chair: *Pascale Le Blanc* (Eindhoven Univ. of Technology) [P.M.Le.Blanc@tue.nl](mailto:P.M.Le.Blanc@tue.nl)

#### State of the Art

Due to the ageing population in most societies, the demand for health care workers is increasing. However, in their daily work settings, health care staff are increasingly confronted with stressors such as high workloads, increasing job complexity, and high emotional demands, whereas the availability of resources to handle these demands is diminishing. Therefore, they are at high risk for developing work-related psychological and physical complaints that may not only harm their work performance, but also negatively affect their private lives.

#### New Perspective/Contribution

The current situation calls for a more thorough understanding of the health and well being of health care staff, and for HRM practices and worksite interventions to enhance these. In our symposium, these topical issues are addressed from both a theoretical and a practical perspective focusing on (practices aimed at) building resources. The first presentation sets the stage by identifying key areas

of future research in this area, as well as practical implications. The second presentation demonstrates the key role of staff work engagement as a link between supportive HRM practices and performance outcomes. The remaining three presentations describe the effects of worksite intervention programs, two of which were specifically targeted at empowering health care staff, and one at achieving a better work-life balance.

#### Conclusion and Implications for Research/Practice

Through this symposium, we hope to demonstrate the fruitfulness of HRM practices and interventions aimed at increasing organizational, job, and personal resources for promoting the health and well being of health care staff.

### ***Presentations of the Symposium***

#### **Matching process and outcomes: The health and well being of health care workers**

*Michael West* (Lancaster Univ. Management School) [m.a.west@lancaster.ac.uk](mailto:m.a.west@lancaster.ac.uk)

#### State of the Art

While we understand factors influencing the health and well-being of people at work generally, there is limited understanding of the specific context factors influencing the health of health care staff. Yet, the costs of ill health and the benefits of positive health for health care staff are significant at a national level. Understanding of the health and well-being of health care staff and designing interventions to promote them is practically and theoretically important.

#### New Perspective/Contribution

This theoretical presentation argues we should promote the health/ well-being of staff as a means of promoting high quality and safe patient care. Achieving a cultural synergy be-



tween the process of managing staff and the mission of providing high quality care for the community is key to interventions designed to create cultures of high quality care in health service organizations.

#### Research/Practical Implications

The presentation will describe key areas of future research needed including interventions to promote positive staff health in health care organizations, the need for large scale studies of culture change interventions and the development of change models that can be applied in health care. The practical implications in terms of management of health care staff in national health economies and promoting effective leadership and team working will also be described.

#### Originality/Value

The presentation offers a unique and powerful perspective on the functioning of health services systems nationally and internationally

### **Engagement as a mediator of the Human Resource Management-performance link in hospitals**

*Anna Topakas (Institute of Work Psychology, Univ. of Sheffield) [a.topakas@sheffield.ac.uk](mailto:a.topakas@sheffield.ac.uk), Jeremy Dawson (Institute of Work Psychology, Univ. of Sheffield), Michael West (Lancaster Univ. Management School)*

#### Purpose

Evidence suggests organizations with better HRM practices generally perform better. Although some research is within healthcare, there has been less focus on explanatory processes. We focus on two elements of “engagement” - psychological engagement (Schaufeli et al., 2002), and involvement (Macey & Schneider, 2008) as possible mediators.

#### Design/Methodology

We used staff survey and outcome data from 147 hospitals in England. IVs were the propor-

tions of employees having well-structured appraisals and working in well-structured teams. Psychological engagement and involvement were each measured by three items (Cronbach's alpha = 0.81 and 0.86 respectively). Organizational performance was measured by patient mortality, patient satisfaction, staff absenteeism, and overall performance ratings.

#### Results

Both HRM practices were strongly linked to both forms of engagement. There was a clear link between HRM and mortality, and a significant link between team working and absenteeism, although other direct HRM-performance links were not significant. Bootstrap tests found significant mediated effects between team working and patient satisfaction ( $p = .001$ ), between appraisal and absenteeism ( $p = .001$ ), and between both HRM and mortality/performance outcomes. In most cases involvement was a stronger mediator than psychological engagement.

#### Limitations

It is not possible to determine the order of causality; measures were constrained to those in secondary data sources.

#### Research/Practical Implications

Hospitals should ensure their HRM practices are tailored to allow and promote engagement and (particularly) involvement, and properly deploy appraisal and team working.

#### Originality/Value

This paper uses routinely collected data to explain mediating processes of a well-known relationship (HRM & performance).

### **Building empowering work environments that foster civility and organizational trust: Testing an intervention**

*Heather Spence Laschinger (Department of Nursing, Univ. of Western Ontario) [hkl@uwo.ca](mailto:hkl@uwo.ca), Michael Leiter (Acadia Univ.), Arla Day (Saint Mary's*

*Univ.), Debra Gilin-Oore (Saint Mary's Univ.), Sean Mackinnon (Dalhousie Univ.)*

#### Purpose

The aim of this study was to examine the impact of a workplace intervention (Civility, Respect, and Engagement in the Workplace [CREW]) on nurses' empowerment, experiences of supervisor and coworker incivility, and trust in nursing management.

#### Design/Methodology

Registered nurses (Time 1,  $n = 755$ ; Time 2,  $n = 573$ ) working in 41 units across five hospitals in two provinces completed measures of workplace empowerment, supervisor and coworker incivility, and trust in management before and after a 6-month intervention. Eight units participated in the intervention, and 33 units were control groups. Multilevel modeling was used to test the impact of the intervention.

#### Results

A significant interaction of time by intervention was found for the access to support and resources empowerment structures, total empowerment, supervisor incivility, and trust in management.

#### Limitations

Units were not assigned randomly to the intervention group as three of the nursing units experiencing problems were given priority for the intervention. Coworker incivility rates in both groups were relatively low at Time 1, so floor effects might account for the failure to find statistical significance. The 40% survey return rate is comparable for many organizational studies but is still relatively low.

#### Research/Practical Implications

CREW process appears to be a promising intervention approach to enhance quality of nursing work environments, which may contribute to the retention of the nursing workforce.

#### Originality/Value

Intervention studies that may promote empowerment and subsequent associated outcomes are rare in the nursing literature, this study was performed in two Canadian provinces

#### **Using the ABLE intervention to improve employee work-life balance, well-being, and recovery**

*Arla Day (Saint Mary's Univ.) [Arla.Day@smu.ca](mailto:Arla.Day@smu.ca), Mandi MacDonald (Saint Mary's Univ.), Nikola Hartling (Saint Mary's Univ.), Lori Francis (Saint Mary's Univ.)*

#### Purpose

There have been increasing calls for more organizational intervention research addressing employee health and wellbeing. In an effort to address this lack of research, we conducted a study to examine the impact of the Achieving Balance in Life and Employment (ABLE) Program on employee wellbeing. ABLE is a phone-based program in which coaches help employees identify and address work and non-work demands and increase resources.

#### Design/Methodology

Participants consisted of 139 employees from 10 organizations ( $N$  (intervention)=72;  $N$  (control)=67). 87% of participants were women (mean age=43 years). Participants completed the Symptoms Checklist (Bartone et al., 1989), measures of work-life, work-parent, and work-spouse balance (Day, 1996), and a measure of recovery (Stevens, 2010).

#### Results

Compared to the control group, the intervention group experienced significant increases in 5 of the 10 recovery experiences, decreased strain, and improved work-life and work-parent balance.

#### Limitations

Several limitations of the study are noted: We did not randomly assign participants to inter-

vention and control groups; Future research should utilize randomized control trials. Some participants withdrew before the end of the study; Research should examine methods to increase retention, and examine the extent to which attrition is associated with motivation and how attrition may impact results.

#### Research/Practical Implications

These results have implications for organizations interested in helping employees reduce strain and increase balance and recovery experiences.

#### Originality/Value

This study provides additional evidence for the validity of the ABLE, and it contributes to our knowledge about the extent to which interventions can be used to improve worker well being.

### **Empowering paramedics in bystander conflict**

*Kim van Erp (Eindhoven Univ. of Technology) [K.J.P.M.v.Erp@tue.nl](mailto:K.J.P.M.v.Erp@tue.nl), Josette Gevers (Eindhoven Univ. of Technology), Sonja Rispens (Eindhoven Univ. of Technology), Evangelia Demerouti (Eindhoven Univ. of Technology)*

#### Purpose

Public service employees (e.g., paramedics, policemen, public-transport employees) are regularly hindered in their work by bystanders. Such bystander conflict may not only harm psychological and work outcomes, but may eventually threaten public or patient safety. On the basis of the Job Demands-Resources Model (Bakker & Demerouti, 2007) we investigate whether a training can increase individual and team resources, such that they will experience less negative consequences when faced with bystander conflict.

#### Design/Methodology

Paramedics (n=82) participated in a medical-emergency simulation in teams of 2 (nurse, driver), while being confronted with a hinder-

ing bystander (an actor). Participants were randomly assigned to the control group (simulation only) or to the intervention group (simulation plus training). Before and two months after the simulation, participants filled out a questionnaire.

#### Results

First results suggests that, indeed, personal (perspective taking) and team resources (team work) significantly increased due to the training ( $p=.04$ ;  $p=.05$ , respectively). Participant's conflict management efficacy significantly increased over time ( $p<.001$ ), but did so in both conditions. Finally, participants in the intervention group reported greater learning effects ( $p=.02$ ).

#### Limitations

Most measures were self-report measures. Future research should include additional objective measures (e.g. absenteeism figures). The training consisted of one session. Future research may want to investigate the impact of repeated training sessions on resources.

#### Research/Practical Implications

Public-service organizations may focus not only on reducing bystander-conflict situations, but may also empower their employees by developing not only their individual resources but their resources as a team as well.

### **Evaluation of an Organizational Health Intervention Program for Low-qualified, Culturally Diverse Workforces (ReSuDi II)**

*Session Chairs: Julia Clasen (Univ. of Hamburg) [julia.clasen@uni-hamburg.de](mailto:julia.clasen@uni-hamburg.de), Christine Busch (Univ. of Hamburg) [cbusch@uni-hamburg.de](mailto:cbusch@uni-hamburg.de)*

#### State of the Art

To date, research on organizational health intervention programs has ignored low-qualified, cultural diverse workforces. A comprehensive evaluation strategy including pro-

cess as well as outcome evaluation of the effectiveness and of the economic efficiency is also rarely found.

#### New Perspective/Contribution

In this second EAWOP-symposium referring to the results of the ReSuDi project, financed by the German Federal Ministry of Education and Research, we present perspectives from academics and practitioners concerning the evaluation of ReSuDi, an organizational Resource and Stress management intervention program for low-qualified, culturally Diverse workforces. The first contribution will present the intervention program, the evaluation strategy and results of the process evaluation of the intervention program. The second and third contribution will present experiences of health insurance companies with the implementation of ReSuDi in middle size and small size companies. Further, a representative of the HR department of a collaborating middle size company will present experienced key features of the intervention process. The fifth contribution is again an academic contribution and concentrates on the outcome evaluation of the effectiveness of ReSuDi. In the last contribution, the economic efficiency of organizational health intervention programs by the example of ReSuDi will be presented by the cooperating economist.

#### Conclusion and Implications for Research/Practice

Research on organizational health intervention program needs to be done interdisciplinary and in close collaboration with practitioners, such as prevention providers and companies. ReSuDi is appropriate for low-qualified, cultural diverse workforces according to the comprehensive evaluation results.

### ***Presentations of the Symposium***

#### **Process evaluation of an organizational health intervention program for low-qualified, culturally diverse workgroups**

*Christine Busch (Univ. of Hamburg) [cbusch@uni-hamburg.de](mailto:cbusch@uni-hamburg.de), Julia Clasen (Univ. of Hamburg), Julia Vowinkel (Univ. of Hamburg), Eva Winkler (Univ. of Hamburg)*

#### Purpose

From the perspective of promoting health chances, the work environment is one of the most important intervention settings. An organizational Resource and Stress management intervention program for low-qualified, cultural Diverse workforces (ReSuDi) was developed and evaluated. In this contribution we present the intervention program and the comprehensive process evaluation.

#### Design/Methodology

ReSuDi is a multiplier concept. The research strategy combines process and outcome evaluation with a mixed-method, multi-level, (waiting-)control-group design and pre-, post-, follow-up measurements with a three month time-lag in two research phases: the formative and the summative evaluation phase (N = 187 and N= 154, respectively for those who participated at all three measurements). The organizational decision and implementation process, the motivation and expectations of the workers and the multipliers, session impacts and utility reactions of the multipliers were assessed.

#### Results

The intervention program has run five times in three companies of different size and industry. 37 peer-mentors and 31 managers have been trained. One intervention has not been delivered as intended. Differential effectiveness can be shown. The following key process factors among others have been identified: the degree and design of process steering, the organizational readiness, the motivation for change, perceived participation and clarification of roles of the multipliers.

### Limitations

This study extends previous findings on process key factors. The present study possesses limitations due to the small sample size across the three measurements.

### Originality/Value

To our knowledge, the study is the first to systematically research the process of an organizational health intervention program for low-qualified workforces.

### **Experiences of a health insurance company with ReSuDi, a multiplier concept of resource and stress management for low-qualified, cultural diverse workforces, in a middle size company**

*Frigga Maßholder (AOK NordWest)*  
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### Purpose

In Germany, statutory health insurance companies like AOK NordWest are bound by law to do worksite health promotion. We act as change agents and initiate health projects in companies. We are very much interested in promoting health changes for the socially disadvantaged like low-qualified workers. Therefore we collaborated as a multiplier in the ReSuDi project, in which a resource and stress management intervention program for low-qualified, cultural diverse workforces has been developed and evaluated.

### Design/Methodology

We gained access to a middle size company, in which we implemented ReSuDi twice in different units of the worksite. The interventions were carried out sequentially, so that we could help to improve the intervention program.

### Results

We made the experience that ReSuDi has a systemic and holistic approach and empowered the key actors of worksite health promotion and the low-qualified workers to deal

with mental stress at work and soft risk factors of health. We managed to improve the internal communication and collaboration in health issues and work organizations through the implementation of ReSuDi. It was difficult to make culture a subject of discussion, in particular for managers. ReSuDi combines well with the German health circle concept.

### Limitations

It remains to be tested how much our experiences generalize to other prevention providers and companies. In collaboration with academics and enterprises we are able to reach low-qualified workers and migrants, who are socially disadvantaged.

### Originality/Value

So far, worksite health intervention programs for the socially disadvantaged did hardly exist.

### **Health promotion offers for small firms: The implementation of an intervention program for low-qualified workers in a small firm**

*Katja Keller-Lanvagt (IKK Classic)*  
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### Purpose

The IKK classic is a health insurance company for guilds and is legally obliged to support firms in health improving measures. The IKK classic fulfils this task in particular with small firms. We collaborated as a multiplier in the ReSuDi project, in which a resource and stress management intervention program for low-qualified, cultural diverse workforces has been developed and evaluated.

### Design/Methodology

We implemented ReSuDi in a small enterprise which undertakes the final inspection of the produced items for a car supplying company. The workforce is low-qualified with a high proportion of migrants. They are strained by one-sided and monotonous work.



### Results

The upper and middle management and the workers were highly motivated to participate because of high job strain and because the intervention program was nearly free of costs. The information of the whole staff and the election of the peer mentors worked well. Unfortunately the internal process steering was nearly lacking, as the company had no structures and process knowledge for health promotion activities. The HR manager responsible for the intervention program did not play an active role in the process. We strongly promoted the implementation process and supported the firm in building up structures and procedures.

### Limitations/Implications

Small firms are motivated to participate in health promotion activities, but they mostly have no structures and process knowledge for that. They need the support of prevention providers to implement intervention programs. Multiplier programs are useful for them.

### Originality/Value

To date, organizational intervention research in small firms is rare.

## **An intervention program for canteen workforces and supervisors – Experience report from an ongoing intervention**

*Doris Floto (Studierendenwerk Hamburg, Personalentwicklung)*

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Our company is a service provider for university staff and students and is running a number of canteens. Canteen workers face a demanding job; they are often low qualified and have a migration background and/or little language skills. The company is concerned with stress induced health problems. We collaborated with the ReSuDi project, in which a resource and stress management intervention program

for low-qualified, cultural diverse workforces has been developed and evaluated.

### Design/Methodology

We started to implement the intervention program in February 2011. ReSuDi has been conducted in eight canteens with groups of peer mentors and supervisors. It will be conducted in four further canteens and in all coffee shops in a (slightly) different form depending on needs and size of the institution. Evaluation workshops with members of division management, human resource and council staff have been carried out.

### Results

Our experiences indicate that key features around the program are very important like managerial support and communication between the various hierarchical levels, the organizational integration of the intervention program and role clarification of managers concerning health-promotive leadership behaviour and of peer mentors.

### Limitations/Implications/Originality

Beside the intervention contents, a profound implementation process of an organizational health intervention program is worth to put effort in.

## **Effectiveness of an organizational resource and stress management intervention program for low qualified, culturally diverse workgroups (ReSuDi)**

*Christine Busch (Univ. of Hamburg) [cbusch@uni-hamburg.de](mailto:cbusch@uni-hamburg.de), Julia Clasen (Univ. of Hamburg), Julia Vowinkel (Univ. of Hamburg), Eva Winkler (Univ. of Hamburg)*

### Purpose

At work, also people in difficult social situations are reachable, like migrants in low-qualified jobs. An organizational Resource and Stress management intervention program for low-qualified, cultural Diverse workforces (ReSuDi) has been developed and evaluated.



In this contribution we present the results of the outcome evaluation towards the effectiveness.

#### Design/Methodology

The intervention research strategy combines process and outcome evaluation with a mixed-method, multi-level, (waiting-)control-group design and pre-, post-, follow-up measurements with a three month time-lag in two research phases: the formative and the summative evaluation phase (N = 187 and N= 154, respectively for those who participated at all three measurements). The outcome evaluation analyses the effects on objective health parameters and subjective job-related well-being and strain.

#### Results

ANOVAs with repeated measures showed significant interaction effects on objective health parameters, like blood pressure and psychosomatic complaints, and on job satisfaction and job strain.

#### Limitations/Implications

ReSuDi is an effective multiplier concept to promote health among low-qualified, cultural diverse workforces. The present study possesses limitations due to the small sample size across the three measurements.

#### Originality/Value

To our knowledge, the study is the first to systematically evaluate an organizational health intervention program for low-qualified, cultural diverse workforces.

### **The economic efficiency of organizational health intervention programs by the example of the ReSuDi program for low qualified, culturally diverse workforces**

Dieter Gloede (Beuth Hochschule für Technik, Berlin) [gloede@tfh-berlin.de](mailto:gloede@tfh-berlin.de)

#### Purpose

Workplace environments offer particularly suitable settings for health-promotion programs aimed at low-qualified employees. By contrast these workforce members tend to be neglected as a target group for health promotion activities due to seemingly low-level contributions to corporate profitability. As a consequence, the financial outcomes of ReSuDi (An organizational Resource and Stress management intervention program for low-qualified, cultural Diverse workforces) and of comparable intervention schemes should be clearly exemplified in order to ensure acceptance among managers and health insurance officials. Numerous attempts have been made in recent years to account for the profitability of worksite health promotion and disease prevention. Most studies, though, give little evidence of cost-effectiveness as they do not conform to generally accepted accounting standards. Notably the widely-used return on investment (ROI) is of doubtful significance and leads to unrealistic conclusions in the context of workplace health programs. Therefore, an alternative method of cost analysis based on multi-level marginal costing is presented here.

#### Results and Research/Practical Implications

By these means the costs and benefits of ReSuDi are depicted and the minimum reduction of absenteeism rates that is required for full internal compensation of training costs can be determined. The recently developed Excel®-tool "CACHEPro" (Cost Analysis of Corporate Health Promotion) is available for easy application of the evaluation method which is presented here.

#### Originality/Value

To our knowledge, the study is the first to systematically evaluate the effectiveness and cost efficiency of an organizational health intervention program for low-qualified, cultural diverse workforces.

## Work and Health of Low-qualified, Culturally Diverse Workforces (ReSuDi I)

Session Chairs: *Christine Busch (Univ. of Hamburg)* [cbusch@uni-hamburg.de](mailto:cbusch@uni-hamburg.de), *Julia Clasen (Univ. of Hamburg)* [julia.clasen@uni-hamburg.de](mailto:julia.clasen@uni-hamburg.de)

### Purpose

There is a substantial body of literature showing that there is an association between social economic status (SES) and health. Morbidity and mortality rates are higher among the low SES members. There is evidence showing that occupational factors play a significant role in the differential risks of low and high SES members. Due to linguistic barriers and/or lacking recognition of occupational qualifications the percentage of migrant workers in low-qualified jobs is particularly high.

### New Perspectives/Contributions

This is the first of two EAWOP-symposia referring to the results of the ReSuDi-project, an organizational Resource and Stress management intervention program for low-qualified, cultural Diverse workforces<sup>1</sup>. In this first symposium we will present the state of the art concerning work-characteristics and health among low-qualified, cultural diverse workforces.

The first contribution presents a review of the associations between work characteristics and well-being among ethnically diverse low-qualified workers. The second and third contributions present recent findings on the relationship between typical work-characteristics of low-qualified employees and psychological as well as psychobiological stress-responses. The fourth contribution introduces the idea of health-promoting leadership behavior as an important job-related resource. The fifth contribution highlights the moderating role of power distance orientation on the relationship between health-promoting leadership behavior

and workers' well-being in low-qualified and culturally diverse workforces.

### Research/Practical Implications

Low-qualified workers are exposed to unfavorable working conditions affecting their well-being and health. The contributions in this symposium emphasize the need for occupational health promotion programs for the low-qualified that help strengthen workers' resources.

[1] funded by the German Federal Ministry of Education and Research (01EL0803).

## ***Presentations of the Symposium***

### **The unskilled worker: The experience of work and well-being**

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### Purpose

Unskilled labor is characterized by low education and low wages. In the last decades, the number of unskilled workers has been on the rise in Europe with a large proportion of immigrants performing these jobs. However, occupational health psychologists have paid little attention to this underserved workforce. The purpose of this paper is (1) to give a brief overview on occupational health research among unskilled workers and (2) to present results from three empirical studies with unskilled workers in delivery, homecare and warehousing jobs in Germany and the United States.

Unskilled workers lack social protection. They are exposed to poor physical working conditions, high risks for injuries and health impairments. The few studies on psychosocial working conditions reveal more job demands and fewer resources for unskilled workers. Racial/ethnic health disparities lead to immi-

grant workers being exposed to poorer working conditions than their native counterparts.

#### Design/Methodology

In three empirical studies (n=757) we investigated how psychosocial work characteristics affect well-being among racially/ethnically diverse unskilled workers.

#### Results

Findings show that despite problematic working conditions the workers' experience of work in terms of job satisfaction and job strain is surprisingly positive. Furthermore, immigrant and native workers differ in their evaluation of work, thus pointing to different expectations and different perceptions of the same working conditions.

#### Limitations/Implications/Value

At this point we still have little understanding of how work characteristics affect well-being among racially/ethnically diverse unskilled workers. Limitations of self-report studies and the need for objective measures of work characteristics and health among unskilled, multi-ethnic worker populations are discussed.

### **Associations between work-characteristics, blood-pressure, and hair cortisol among low qualified workers in Germany**

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#### Purpose

Individuals with low SES are especially prone to suffer from cardiovascular disease (CVD). Workers with low SES are often low qualified and experience unfavorable working conditions such as job insecurity, shift-work, high physical demands, time pressure, low control, and low social support at work. Yet, there is a paucity of literature on the effect of work - characteristics on the physical antecedents for

CVD such as cortisol excretion and blood-pressure among individuals with low SES. In this contribution we analyze the relationship between typical working-conditions of low qualified workers and the novel psychobiological stress-parameter hair-cortisol and blood pressure.

#### Design/Methodology

In a cross-sectional field study[1] the job-characteristics of low qualified workers from three German companies were assessed by questionnaire. Hair samples, casual blood-pressure readings, health status and body-mass-index (BMI) were collected in a short medical examination on the work site. Complete data of 354 employees were analyzed by means of multiple and logistic regression analyses.

#### Results

The results suggest that job insecurity, shift-work and high physical demands are associated with elevated blood-pressure. Preliminary analyses show that hair cortisol concentrations are associated with sex, duration of employment and BMI but not with work-characteristics.

#### Limitations/ Implications/Value

The findings concerning blood-pressure are in line with previous research suggesting that adverse working-conditions may contribute to the development of CVD among individuals with low SES. Associations between work-characteristics and hair cortisol may be blurred due to methodological issues (self-report data, variable/unknown patterns of cortisol output).

[1] in the context of the ReSuDi-project

### **Working conditions and job-related well-being in low-qualified, culturally diverse workforces**

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#### **Purpose**

In recent years a growing public interest developed which stresses the meaning of psychological well-being at work. To date, little is known of the psychological well-being of low-qualified workers. According to current stress taxonomies low-qualified workers are exposed to high psychosocial, physical, and task-related demands and minor job resources. A high proportion of immigrant workers constitute a culturally diverse workforce. We expected adverse working conditions to go along with impaired mental health and migration background to affect this relation.

#### **Design/Methodology**

Within a broader field study[1], we collected data in three companies from N = 478 low-qualified workers, 50 percent of whom report a migration background. We ran multilevel analyses to assess the relationship between working conditions and psychological well-being by paying special attention to positive well-being. Therefore, we introduced a scale of affective, job-related well-being which was developed on basis of the WHO-5 well-being index.

#### **Results**

Data analyses revealed that job demands and resources were related to the psychological well-being as presumed and migration background added power. Affective, work-related well-being was a sensitive measure in capturing health disparities among immigrant workers and their German counterparts in terms of different workplace characteristics.

#### **Limitations/ Implications /Value**

Further studies need to demonstrate whether these results generalize to other low-qualified occupations and immigrant groups. Yet, this contribution extended previous findings on a neglected workforce and introduced a frequently claimed positive indicator of job-related well-being.

[1] in the context of the ReSuDi-project

### **Health-promoting leadership behavior: The role of work characteristics**

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#### **Purpose**

In recent years, transformational leadership as a health-related factor has increasingly become a focal point of interest in research and practice. However, the pathways and mechanisms underlying this association are not yet well understood. In order to gain knowledge about how or why transformational leadership and employee well-being are associated, we investigated the mediating effect of the work characteristics role clarity and predictability.

#### **Design/Methodology**

The study was carried out on 618 employees working in the German health-care sector. We tested the mediator effect using structural equation modeling.

#### **Results**

The results indicate that these work characteristics role clarity and predictability fully mediate the relation between transformational leadership and employee well-being.

#### **Implications/Value/Limitations**

These results support the notion that work characteristics play important roles in identify-

ing health-relevant aspects of leadership behavior. Our findings advance the understanding of how to enhance employee well-being and provide implications for the design of leadership-related interventions of workplace health promotion.

### **Health-promoting leadership behavior and the moderating role of power distance orientation in low qualified, culturally diverse workgroups and their supervisors**

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Low-qualified workers experience comparatively unhealthy working conditions in combination with limited resources at work. In a quantitative field study we investigated the influence of specific supportive behaviors of low-level supervisors (social support, positive feedback, task-oriented and interpersonal communication) on health and well-being of their subordinates. The large amount of immigrants in low-qualified occupations in Germany creates a specific culturally diverse composition of these workgroups and thus heterogeneous perceptions and expectations of a supervisor. For this purpose we developed behavioral leadership survey measures adjusted to the target-group. The data of 474 un- and semiskilled employees nested within 35 immediate supervisors in 3 German companies confirmed a rating bias dependent on the power distance orientation of the employees.

Results indicated that subordinates with a high power distance orientation rated the behavior of their supervisor as more supportive and less interpersonal than their colleagues with a low power distance orientation. Additionally, the self-rated power distance orientation of the respective supervisor (Level 2 variable) changed the relationship

between the perceived supervisor behavior and the health and well-being outcomes of the subordinates (Level 1 variables: emotional exhaustion, job satisfaction, cognitive irritation, psychosomatic complaints, affective job-related well-being). More specifically, a larger supervisor power distance was found to attenuate the positive effect of perceived positive feedback.

The study demonstrates primarily that supervisor behavior is a potential resource for the often neglected low-skilled workforce. Additionally we found various hints for including culturally affected attitudes like power distance orientation in further analyses of multicultural research.

### **Single Papers**

#### **Innovative concepts and trends in workplace health promotion in the German automotive industry**

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Due to demographic changes more companies are concentrating on how to maintain their employees' health and work ability. Corporate fields of intervention, i.e. work organization, qualification, health promotion, HR development and career planning, should be conceptualized accordingly. Several approaches have been developed, but there are only few scientific findings, especially concerning the connection between age management measures and procedures. Our project analyzes and compares the different approaches and in a next step optimizes and tests them.



Furthermore, it delivers practical suggestions concerning collaboration with stakeholders of prevention and social security. Partners are Audi, Bosch, Daimler, Evobus, Ford, Opel, Porsche, and Volkswagen.

Over 60 semi-structured expert interviews were conducted with protagonists of health and age management (e.g. health prevention, company doctor, HR and disability management) and company data were analyzed. Workplace health promotion plays a key role in a holistic age management. Organizational success factors comprise e.g. cooperation between different corporate fields (e.g. work organization, ergonomics and qualification), inclusion of employees' health in the company strategy and the coordination of preventive and rehabilitative interventions. Trends and future challenges include the development of sensitive key indicators.

The results help companies to improve employees' health and working conditions. They can positively influence the way we work tomorrow.

To our knowledge, this is the first study taking a closer look at the interaction of workplace health promotion and other organizational fields. Solutions for the demographic challenges from the German automotive industry are presented and ideas for shaping the future are discussed.

### **Mental health among psychologists: The role of leadership support**

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#### **Purpose**

According to a social support perspective leaders are an important resource likely to influence subordinates' health. However, it is still unclear as to what extent and in what

ways social support from leaders influences the health of psychologists. The aim of this study was to investigate the impact of social support from leaders on mental health among Norwegian psychologists.

#### **Design/Methodology**

Based on a cross-sectional design, data was collected by means of anonymous self-report questionnaires addressing central aspects of 1,408 Norwegian psychologists' job, health and well-being. Statistical analyses were conducted using the Statistical Package for Social Sciences (SPSS) 19.

#### **Results**

Leader support acted as a strong predictor of mental health, as compared to other sources of social support. Further, leader support both moderated and had a stress-preventing effect in the relationship between perceived stress and the mental health of the psychologists.

#### **Limitations**

The results need to be tested in a longitudinal design.

#### **Research/Practical Implications**

The findings suggest that leader support is an important factor likely to influence the health of psychologists. Yet, the fact that social support from leaders exhibit different patterns of possible associations with health implies that different interventions strategies may be used when preventing health-related problems among psychologists.

#### **Originality/Value**

Based on the stressful nature of their work and their reported strains, psychologists are an important group with respect to provide knowledge regarding factors aimed at the reduction of work strains. To our knowledge, the study is the first to systematically analyze the impact of social support from leaders on mental health among Norwegian psychologists.



### **Enhancing collective capacity-building among occupational health actors throughout workplace mental health interventions**

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#### **Purpose**

Along with empowerment, organizational learning, health development or participation, capacity building is a people-centered development approach that enhances the ability of individuals, groups or organizations to be proactively engaged in addressing their health issues (Eade, 1997; Hoffmann, Jenny & Bauer) and therefore extending and multiplying health effects. Based on Hatchuel (2005) theoretical approach of collective action, this communication presents a model of building collective capacity throughout workplace mental health intervention.

#### **Design/Methodology**

Data was gathered based on a participatory action research project which evaluated preventive actions and practices in seventeen divisions of an international company. 150 occupational health key actors (managers and human resources managers, occupational health professionals, health and safety managers, members of the committee for health and safety at work, union representatives) responded to a questionnaire. Then the results of the survey were discussed in small groups of occupational health actors on each of the seventeenth division of the company.

#### **Results**

Analysis was directed toward identifying the processes of collective capacity-building. Four stages of building collective capacity were identified: informal work, coaction, cooperative work, and collaborative work. At each stage, the combination of the process of relationship building and collective competence

building resulted in specific preventive actions.

#### **Limitations**

This model needs more testing in order to be generalised.

#### **Research/Practical Implications**

This model provides a base for developing existing good preventive practice and suggesting actions that will enhance collective capacity among occupational health actors.

#### **Originality/Value**

To our knowledge, the study is the first to analyze the process of collective capacity-building among occupational health actors.

### **Recovery from burnout during a one-year rehabilitation intervention and a six-month follow-up: Associations to coping strategies**

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#### **Purpose**

The aim was to 1) contribute to knowledge of the change processes of burnout symptoms (i.e., trajectories) during a one-year rehabilitation and a six-month follow-up, and 2) investigate if rehabilitation activities, in terms of learning effective coping, were related to possible recovery processes.

#### **Methods**

This study applied person-oriented approach to employees (N = 85) who have sought rehabilitation because of burnout. To identify trajectories for each burnout symptom, Latent Profile Analysis (LPA) was used. To test differences in coping strategies between the burnout symptom trajectories, multivariate analysis of variance (MANOVA) was used. One-way analysis of variance (ANOVA) for repeated

measures was used to study changes in coping strategies within each trajectory separately.

#### Results

We identified four trajectories for exhaustion: “Serious exhaustion – recovered”, “Mild exhaustion – recovered”, “Serious exhaustion – decreased” and “Serious exhaustion – stable”; three trajectories for cynicism: “No cynicism – stable”, “Mild cynicism – stable” and “Serious cynicism – stable”; and three trajectories for reduced professional efficacy: “Mild reduced professional efficacy – stable”, “No reduced professional efficacy – stable” and “Serious reduced professional efficacy – increased”. Burnout recovery was most consistently associated with a decrease in emotion-oriented coping, which was the most prone to rehabilitation.

#### Limitations

Small sample size restricts the occurrence of main or interaction effects. Also, larger sample size could produce more trajectories.

#### Practical Implications

The targeting of rehabilitation intervention should be more precise and the content of intervention should be tailored.

#### Originality

The novel aspect of the study was recovery processes of burnout by using a person-oriented approach on a long-term perspective.

### **The effect of immediate feedback: Evaluation of an occupational health web-based intervention tool (ISAT – Interactive Self-Assessment Tool)**

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#### Purpose

This preliminary study aims to evaluate a web-based positive occupational health interven-

tion tool, by experimental manipulation of a key design feature, the immediate feedback delivered directly to the respondent.

#### Design/Methodology

A total 148 subjects were randomly divided into an experimental condition (N=72), which received immediate feedback after answering the self-assessment questionnaires, and a control condition (N=76), which only received delayed feedback. One month later the second measurement took place (N<sub>experimental condition</sub>=34; N<sub>control condition</sub>=30).

Overall satisfaction and the intention to actively solve problems were measured using satisfaction survey questions previously used. Self-efficacy was measured using the Dutch adaptation of the General Self-Efficacy Scale. Proactive attitude was measured by the Proactive Attitude Scale and Empowerment by the Worker Empowerment Scale.

#### Results

The results show that employees who received immediate feedback are more willing to use the tool in the future, and to discuss the problem with others compared to the control condition.

No significant differences were found, in both moments, in proactive attitude, self-efficacy and empowerment aggregated measurements.

#### Limitations

Lack of a follow-up measurement of effective change of personal attitudes and behaviors at work.

#### Research/Practical Implications

A follow-up measure after a couple of weeks might be needed in order to observe changes with regard to proactive attitude, self-efficacy and empowerment.

**Originality/Value**

A lot of innovative tools are developed for e-mental health applications at the workplace, however a lack of research exists about the specific components of these applications, such as personalized normative feedback and their effectiveness.

### **Sleep quality and job strain interact to predict diurnal cortisol secretion**

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**Purpose**

To analyze if sleep quality and job strain was related to the diurnal pattern of cortisol reactivity, measured as the mean difference between awakening and evening (10PM) measures of saliva cortisol over a full work week period.

**Design**

Sleep quality, using the PSQI, and job strain, using a modified version of the JCQ, were assessed for each work day using a self-report diary. Both input variables were dichotomized about the median and a factorial ANOVA was used for the statistical analysis. The sample consisted of 76 British white-collar workers (24 women, 52 men; mean age 45.8 years).

**Results**

Lower perceived sleep quality was significantly associated with a lower difference between morning and evening cortisol secretion ( $F=5.20$ ;  $p<.05$ ), while job strain had no main effect on the diurnal pattern of cortisol reactivity. There was however a significant interaction effect between the input variables ( $F=4.08$ ;  $p<.05$ ), indicating that participants with low sleep quality and high job strain had the smallest difference between morning and evening cortisol over the week.

**Limitation**

Morning cortisol was not assessed by the full Cortisol Awakening Response.

**Research**

These findings support the hypothesis that lack of sleep particularly among white collar workers with high long-term job strain may result in an altered diurnal cortisol secretion pattern between morning and evening cortisol reactivity.

**Value**

The study was based on both morning and evening cortisol readings taken over a full work week.

### **Mental illness in the workplace – The impact of job stress and options for prevention within companies and for boosting employees' health awareness**

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**Purpose**

The degree of work incapacity due to mental disorders is increasing. Within companies, there is a growing need to know how to deal with highly stressed employees who are suffering from the psychological effects of stress.

**Design/Methodology**

A systematic review of studies on the impact of psychosocial job stress on depressive and anxiety disorders together with a review of studies on the efficacy of interventions intended to lower job stress is presented.

**Results**

There is sound scientific evidence of the impact of psychosocial job stress on depressive and anxiety disorders. The effects vary, but it can be assumed that there is an increase in the risk of at least 50 per cent among employees exposed to stress compared with those not exposed. This holds true when confounders like personality traits are controlled for.

### Limitations

Although the report primarily discusses studies that measure psychosocial job stress on the basis of a theoretical model and that use a prospective design, thereby taking the relevant control variables into account, the question of causality is treated cautiously because the mechanisms have not yet been explored in detail.

### Research/Practical Implications

The findings suggest that companies should pay more attention to the issue of psychosocial job stress. Interventions should be implemented systematically and should, among other things, identify stressful working conditions, facilitate participation and guarantee the support of management. The external and company-based experts should be well trained.

### Originality/Value

The recommendations for practical application are based on the latest epidemiological and intervention research, and bring the findings from both of these research fields together.

## **Prevention of chronic back pain: A randomized control study of Bochum cognitive-behavioral training**

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### Purpose

Development and evaluation of a short cognitive-behavioral training in an office work setting. Bochum Cognitive-Behavioral Training (BCBT) aims at preventing chronification of back pain.

### Design/Methodology

A group-randomized pre-posttest wait-list control trial with assessment at pre- and post-test was conducted. Employees of nine tax offices participated voluntarily in the study. They were included if their pretest score of

chronicity of back pain on the graded chronic pain scale was grade 1 or higher. Twelve groups of 11 employees in total were randomized into either the intervention or control condition. All training sessions took place at the office.

A multilevel analysis was run using the lme4 package in R language. The random intercept models accounted for the clustering of the data. Dependent variables were the differences between posttest and pretest scores.

### Results

Statistical computations yielded significant effects for pain intensity, disability, depression and time for physical activities. All significant differences between treatment and control condition were in the expected direction. Effects (Cohen's d) were of medium size ranging between  $d = -.30$  (depression) and  $d = .53$  (time for physical activities).

### Limitations

Long term effects, i.e. one year and beyond have not been studied yet. The study took place within the public administration setting, limiting generalization of results to private business context.

### Research/Practical Implications

Bochum Cognitive-Behavioral Training meets the demands of public administration practice. Cognitive-behavioral intervention in the workplace seems to prevent chronification of back pain, thereby reducing costs and individual suffering.

### Originality/Value

First group-randomized controlled trial of a cognitive-behavioral training at the workplace preventing chronification of back pain

### **Theory-based promotion of seasonal influenza vaccination in the workplace – Insights from two randomized controlled trials investigating individual, social, and organizational factors involved in health behavior change**

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#### **Purpose**

Two randomized controlled trials were conducted to enhance participation in influenza vaccination at the workplace. Study 1 was based on the Health Action Process Approach; employees received one of two messages: one aiming at motivating employees, the other assisting self-regulation (self-efficacy, planning). In Study 2; social norms were additionally addressed. Further, organizational health climate was investigated as an additional social resource enhancing participation in the preventive program.

#### **Design/Methodology**

In both studies, participants were surveyed five months apart (Study 1 N=851; Study 2: N=287). Social cognitive variables were assessed (intention, planning, self-efficacy, injunctive norm, behavior; health climate). Multivariate analyses, analyses of variance, mediation analyses were conducted.

#### **Results**

In Study 1, the intervention group assisting self-regulation yielded an indirect effect only via planning (not self-efficacy) on behavior ( $p \leq .001$ ). In Study 2, results of Study 1 were replicated, and a marginal effect for social norms occurred ( $p = .07$ ). However, health cli-

mate was not found to support employees' participation in a worksite flu program.

#### **Limitations**

There was a large drop-out rate from Time 1 to Time 2.

#### **Research/Practical Implications**

Both Studies highlight the value of theory-based interventions in a workplace setting. In particular, Study 1 emphasized the importance of volitional factors for vaccination behavior beyond motivational variables. Study 2 pointed to social influences. however, the role of health climate as an organizational supportive factor remains unclear and needs further investigation.

#### **Originality/Value**

individual, and social predictors of health behavior were investigated together in a RCT-design; Further, the organisational environment for effective health promotion is considered.

### **How time and perceptions of social context shape employee absenteeism trajectories**

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#### **Purpose**

The present study aims to investigate the dynamic, temporal accrual of social influences on employee absenteeism.

#### **Design/Methodology**

Employees' responses (N = 744) to a self-report questionnaire were matched with longitudinal absence data. Latent growth modeling was used to trace absenteeism trajectories over 4 years for employees with different organizational tenure, and test antecedents that

accounted for the social influence (i.e., perceptions of social context).

#### Results

Higher-tenure employees exhibited flat trajectories while those with lower tenure (1-3 years) gradually increased their absenteeism to conform to colleagues (i.e., the dominant norm). Moreover, such increase was higher when employees had more positive perceptions of work colleagues, and lower when they held more positive perceptions of top management. Perceptions of supervisors, however, were unrelated to the rate of change.

#### Limitations

The main limitation is the cross-sectional measure of perceptions of social context. Some caution should also be taken in generalizing the results to organizational contexts with different standards for absence behavior.

#### Research/Practical Implications

The findings point to implementing long-term, rather than isolated and occasional, interventions of absence management, which would prove particularly beneficial with shorter-tenured employees. They also suggest that organizations need to monitor not only the explicit standards but also the informal norms about absences, and to develop policies conducive to a pro-attendance culture among employees.

#### Originality/Value

This represents the first longitudinal study on absenteeism at the individual-level of analysis and it clarifies how employees learn and adapt to organizational absence cultures.

### **Presenteeism, productivity losses, supervision support and role ambiguity: A longitudinal study in an IT company**

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#### Purpose

Presenteeism is a new topic in the organizational literature, and refers to the fact that employees go to work despite being ill. Although some models of presenteeism have recently emerged, empirical findings are still very scarce. The aim of this present study is to contribute to the presenteeism research by extending the importance of supervision support and role ambiguity on productivity losses associated with presenteeism.

#### Design/Methodology

The sample consisted of 99 employees from an IT consulting company measured in a two-wave (T1–T2; 6-month interval) longitudinal study.

#### Results

Results showed that role ambiguity (T1) was negatively related to productivity while affected by presenteeism (SPS-6) (T2). Although no correlation was found between supervision support (T1) and productivity while affected by presenteeism (T2), role ambiguity (T2) partially mediated the relationship between supervision support (T1) and the SPS-6 global score (T2).

#### Limitations

An important limitation is that all variables were exclusively measured with self-report instruments. A second limitation is related to the size and characteristics of our sample – results from an IT company may not be generalizable to other sectors.

#### Research/Practical Implications

Results highlighted the need for reducing uncertainty via the role of supervision. Moreover, certainty about expectations, behaviors and consequences associated with a particular role may contribute – in a mid-long term – for a reduction of presenteeism.



**Originality/Value**

This longitudinal study extends the presenteeism literature by focusing on work related variables. The mediation of role ambiguity is particularly relevant for clarifying the “delayed” association between supervision support and productivity losses due to presenteeism.

### **Efficacy of a work-related group treatment for exhausted persons undergoing vocational rehabilitation**

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**Purpose**

Using the inventory “AVEM” it is possible to classify types of work-related coping behaviour. G: healthy-ambitious, S: unambitious, A: excessively-ambitious, B: resigned. The purpose of the study was, to explore whether resigned (type B) persons, who take part in a group treatment, get better marks from their supervisor at work experience regarding their resilience than controls.

**Design/Methodology**

Data were collected at two adult education institutes. Controls filled out the AVEM-Inventory and received the results in written form. The treatment group filled out the inventory as well and was given verbal feedback. Persons of the treatment group, that were classified as resigned, were additionally offered a work-related group treatment. At the following work experience supervisors were asked to rate resilience using marks (1=best, 6=worst).

**Results**

Resigned persons of the controls (n=102) received an average mark of 2.47, excessively-ambitious (n=60) a mark of 2.13, unambitious (n=61) a mark of 2.24 and healthy-ambitious persons a mark of 1.87 ( $F=5.179$ ,  $df=3$ ,

$p=0.002$ ). The Duncan Post Hoc Test shows significant differences between resigned and healthy-ambitious persons within the controls. Resigned persons with group treatment (n=48) received an average mark of 1.99, resigned people of the controls 2.47 ( $T=-2.467$ ,  $df=148$ ,  $p=0.015$ ).

**Limitations**

It is unclear whether similar results can be achieved by extra occupational treatment.

**Research/Practical Implications**

Application of AVEM-based interventions for resigned persons in vocational rehabilitation are helpful to improve the ratings of resilience at place of work.

**Originality/Value**

The particular value of this approach is the demand-oriented intervention via assessment with predictive validity

## **Posters**

### **Psychosocial exposure at work' impact on work ability: industry workers versus non-industry workers**

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**Purpose**

I) To analyze the psychosocial exposure at work (PSEW) and its' impact on general work ability. II) To compare industry workers with the non-industry workers; iii) To draw general recommendations for designing safer, healthier and fairer workplaces

**Design/Methodology**

A cross-sectorial survey was conducted: i) in industrial settings, encompassing 621 active workers, 38% (235) women and 62% (386) men (mean age 39; min. 20; Max. 65; SD 10,97); ii) non-industrial settings, encompassing 4162 active workers, 54% (2237) men and 46% (1925) women (Mean age 39; SD 9,63) . The variables are Work Ability measured by the Work Ability Index (WAI), and psychosocial work environment measured by the Copenhagen Psychosocial Questionnaire (COPSOQ).

**Results**

In both samples work ability decreases with age and is correlated with PSEW. PSEW is a reality denoted by significant correlations of the different psychosocial environment factors and general WA.

Industry workers are more liable to stress influences on WA than non-industry workers, and less susceptible to factors such as work meaning, quantitative demands, extenuation, leadership quality and work influence.

The results show that even on highly complex and heavy jobs such as the ones in metal-working companies (industry workers) exposure to psychosocial factors such as stress, offensive behaviours and the perception for career development has a high impact on general work ability when compared with non-industry workers

**Research/Practical Implications/Limitations**

Comprehensive studies on industry workers intend to be an incentive to the development of good practices allowing to benchmark in a national level WA and PSEW.

**Originality/Value**

Scientist-Practitioner Collaborative Contribution aiming to give a solid ground for workplace interventions.

**Work-related coping and intention for return-to-work as outcome for a group therapy on work-related anxieties**

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**Purpose**

Work-related-anxieties are a frequent and disabling problem in patients with chronic mental and somatic disorders. These anxieties lead to long-term-sickness-absence and early retirement.

Therefore a cognitive behavioral group-psychotherapy was developed in inpatient rehabilitation. This therapy aims at improving patients' capacities for successful coping with work-related-anxieties and anxiety-provoking stimuli at work (superiors, social exposition and conflicts, achievement requirements and possibility for failing, accidents, uncertainty concerning organizational changes), and increasing the intention for return to work.

As work-related-anxieties rather tend to increase at discharge from an inpatient rehabilitation when workplace exposition comes up (Muschalla & Linden 2012), an independent outcome measure, namely for work-related coping-behavior and return-to-work-intention was required.

**Design/Methodology**

Based on established cognitive behavioral programmes for the treatment of anxiety disorders (Alsleben et al 2004; Hillert et al 2007; Hinsch & Pflingsten 1998; Margraf & Schneider 1990) and a systematic search in psychological research on behavior control and action intention (Heckhausen & Gollwitzer 1989; Ajzen 1985, Prochaska & DiClemente, 1983) we developed a self-rating questionnaire which measures specific work-related coping-behavior and return-to-work-intention.

This questionnaire was evaluated in rehabilitation inpatients in cardiology, neurology, orthopedic and psychosomatic clinics.

#### Results

The results from the evaluation of the questionnaire will be presented.

Return-to-work-intention can be described according to the degree of concreteness. Specific work-related coping-behavior can be described dimensionally.

#### Research/Practical Implications

The development of this self-rating-scale is a model approach for a stepped measuring of therapy outcome, covering a broader scope of relevant concepts (degree of perceived coping capacities, steps of intention for return) than a global measure of subjective return-to-work-prognosis.

### **Can increased knowledge about work and health increase well-being? – An intervention study among social service employees**

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#### Purpose

Research has consistently documented a connection between working conditions and employee well-being. The literature emphasizes the importance of a balance at work – for instance, between demands and control, work and recovery, and effort and reward – for work attitudes and health. The purpose of this study is to investigate if increased knowledge through an intervention focusing on the connection between work environment and health has an effect on employees' work climate and well-being. The intervention focuses on a variety of demands and resources at work, in addition to well-being.

#### Design/Methodology

The data is retrieved from an on-going intervention study conducted in the public sector. A total of 178 social service employees participated in a two wave electronic survey conducted before and after the intervention. The intervention was directed to management and employees and had a survey feedback design (4x3 hours during a nine week period). The questionnaire included measures of demands (e.g., workload), resources (e.g., autonomy), and well-being (e.g., quality in sleep).

#### Results

Preliminary analyses show that the mean levels of demands, resources and well-being generally remained stable over time. However, there was a decline in job satisfaction and social support over time.

#### Limitations

The preliminary results reported at the conference need to be supplemented by follow-up data from a comparison organization. The aim is to collect such data.

#### Research/Practical Implications

These results may be useful to organizations that need guidance in how to better integrate a positive work environment mindset into their organizations.

#### Originality/Value

There is room for more intervention- and longitudinal studies within occupational psychology.

### Health care managers learning leadership communication by listening to subordinates

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#### Purpose

Health-care middle managers today are exposed to extensive demands on their leadership concerning administration, economy, care-quality and work-environment, and related expectations to continuously and efficiently decide, act and communicate. Strategic communication is dominant, and dialogical communication - especially listening to subordinates, is scarce but considered promotive for healthy work-environments. No research focusing especially healthcare managers' dialogue is found. The present study aimed at examining the ways in which healthcare managers experienced participating in a dialogue programme intervention with their staff.

#### Design

A qualitative interview study analysing interviews and documents with qualitative content analysis, using semi-structured interviews with eight participating middle managers. The dialogue programme, conducted by dialogue-trainers, focused learning of fostering and assisting workplace-dialogue. For managers the task was listening to and observing the intervention, as subordinates trained practicing dialogue.

#### Findings

Managers' learning experiences emerging were; Becoming aware of communication containing perceived interaction between subordinates and own non-verbal interaction with subordinates and trainer. Discovering communicative actions for leadership, meant

gaining self-knowledge and discovering models from dialogue trainers for use in leadership, noticing trainers acting democratically and pedagogically. Converting theory into practice signified practicing dialogue-promoting conversation manners with subordinates, peers and superiors.

#### Limitations

Only eight managers decided to participate due to stressful settings. Utilizable additional data would have been observations by researchers during interventions.

#### Research/Practical implications

Importance of listening, good hearing and support from superiors for well-functioning leadership communication at work.

#### Originality/Value

Contributions to knowledge about managerial leadership communication and conditions for learning.

### Evaluation methods of health and well-being promotion intervention projects

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#### Aim

"The sound of well-being" (SOW) is an intervention implemented to improve well-being and health in the public sector. Normally, interventions at work are adopted to correct anomalies and solve problems. Here, an intervention was utilised to spread joy, increase motivation and unity and to stimulate work engagement in general. The aim was to find the optimal method for evaluating such a project.

#### Method

The main content has been choral singing where departments in a company have

formed choirs that have practiced together and eventually competed to be the best choir. Choral singing can contribute to creating a positive environment and social cohesion, both at work and in the community (Clift & Hanow, 2001). Two evaluations have so far been undertaken (Vaag, Saksvik, Theorell, Skillingstad, & Bjerkeset, in press; Vaag, Saksvik, Bjerkeset, Giæver & Wennes, submitted).

#### Discussion

We have been working to develop optimal methods for interventions at work when it comes to design of the process as well as the actual content of the evaluation. The question is whether there are psychologically advisable methods by which to implement interventions? Based on our experiences in the field of “healthy change processes”, we argue for the importance of insight into the organization, its norms and diversity of reaction patterns. Furthermore, that leaders and managers should be present throughout the change process, that roles should be well defined and the necessity of handling conflict, something in which might increase success (Saksvik et al., 2002; Tvedt, Saksvik & Nytrø, 2009; Tvedt & Saksvik, 2012).

### **Can paid sick leave reduce presenteeism among physicians?**

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Presenteeism, referred to as the phenomenon of employees attending work while ill, has shown quite common among physicians (Baldwin, Dodd, & Wrate, 1997; McKeivitt, Morgan, Dundas, & Holland, 1997; Rosvold & Bjertness, 2001; Waldron, 1996). In regard to

research indicating that presenteeism among physicians may have major negative consequences both for the organization, person and patient, recommendations on how to decrease presenteeism has been suggested. Among other recommendations given in the paper, Widera et al. (2010) propose to decrease the financial pressure by entering paid sick leave for all employees working in the health care setting.

#### Aim

To investigate how national differences in paid sick leave influence presenteeism among physicians employed in university hospitals in seven European countries.

#### Methods

Data contains: 1) document analysis on formal rules governing sick leave in each country, 2) university hospitals register on sickness absence, 3) self-rated measures on sickness presence and absence. The survey data includes 3 500 physicians from phase I (2002-2011) and 6 500 hospital physicians of phase II (2012-2018). The empirical analyses will be descriptive, with correlations and prognostic investigation of data to explore the relationship between legislation and presenteeism.

#### Discussion

One would anticipate that physicians working in countries with a welfare system including paid sick leave, as the Nordic countries, reported lower rates of presenteeism. However, physicians in the Nordic countries show higher levels of presenteeism than other occupational groups.

Expected results are empirical knowledge into international differences, and characters of presenteeism, as well as factors that promotes presenteeism.

### **Job-related stress and nursing staff turnover: The moderating effect of recognition of performance and achievement**

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#### **Purpose**

This research aims firstly to analyze the correlation among job-related stress (JRS), recognition (R) and intention to stay (ITS). Secondly, it aims to verify the effect of R on the relationship between JRS and the ITS.

#### **Design/Methodology**

The sample consisted of 364 nurses (71.2%) working in an Italian Hospital. They filled in a questionnaire including the Italian version of: Nursing Stress Scale, Intention to Stay Scale, and Recognition Scale.

#### **Results**

Correlations study ( $r$ ,  $p < .01$ ) highlighted a negative correlation between R and JRS; a positive correlation between R and ITS; a negative correlation between JRS and ITS. The effect of R on the relationship between JRS and ITS was studied through hierarchical regression analyses. Nurses under greater levels of JRS show a stronger ITS if they perceive a stronger level of R.

#### **Limitations**

The study did not take in account the influence of personal characteristics on the relationship between JRS, R, and ITS.

#### **Research/Practical Implications**

These findings bring out the importance of R in order to reduce the perception of JRS as well as to moderate the negative influence of JRS on ITS. Nurse managers should aim to reduce the presence of stressors, e.g. through taking positive actions on workloads, and also increase R, e.g. through giving explicit positive feedbacks.

#### **Originality/Value**

The relationship between JRS and ITS among Hospitals has been the subject of many studies on nursing, but few researches have dealt with the task of identifying what variables could soften the impact of JRS on the nurses' ITS.

### **Unwinding, recuperation, and health among social workers and caretakers at psychiatric ward**

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#### **Purpose**

The purpose of this study is to investigate unwinding and recuperation among social workers, caretakers at a psychiatric ward, and teachers as well as caretakers at a psychiatric school for children.

#### **Design/Methodology**

Cluster analysis was used to identify groups of individuals ( $n=377$ ) with similar activation-recuperation profiles. Six items were used and combined to identify level of activation and recuperation during 24-hr day. Three clusters were identified: "alert", "in-between", and "recuperated". 28% fell into the non-recuperated group, 44% in-between group, and 29% alert group. In the second analysis we investigated how the activation-recuperation profiles differed on a) symptoms of ill-health, b) illness related absence, c) organizational aspects.

#### **Results**

Preliminary analysis shows that non-recuperated group have more symptoms of ill-health, higher degree illness related absence, and poorer attendance of when sick than the others groups. Failure to recuperate was related to aspects of work the environment such



as imbalance between demands-control, and work-life imbalance and illegitimate tasks and wrong task.

#### Limitations

Cross-sectional studies of this kind do not able to test long-term effects. Therefore, we may not answer the question whether these effects are stable over time.

#### Research/Practical Implications

From a preventive perspective, it is important to identify situations and processes that may lead to occupational exclusion. In the case of this group of social workers and caretakers, a pattern emerged were strongly associated with fatigue, anxiety, and failure to recuperate.

#### Originality/Value

The value this study brings is the understanding how organizational characteristics may wear people down over a period of time by affecting negatively on individuals ability to unwind and recuperate.

### **Employees' health and high work intensity: The influence of decision latitude and job demands on health indicators**

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#### Purpose

In different industries, we can increasingly observe changes of work requirements and conditions, e.g. changing modes of management control or changes of employees' decision latitude (cf. Kratzer et al., 2011) for several years. Along with the decentralisation of responsibilities and the delegation of control in these changes (Hinrichs et al., 2009), the Job Demand-Control Model (JDC) would lead us to expect improved health indicators. But recent statistics of (German) health insurances indicate an increase of mental illnesses. This casts doubt on whether a core assumption of

the JDC is still valid: Does "control" still have an important impact on health indicators in present work environment?

#### Design/Methodology

Based on a company survey (with two points of measurement), we want to investigate into the influence of work intensity and decision latitude on health indicators. We will refer to Karasek's JDC Model and further control for attitudes towards work. At the first point of measurement, 251 employees of an automotive supplier have joined the survey. They tend to work under time pressure and high work intensity.

#### Results

As expected, we reveal a (negative) correlation between work intensity and health indicators. But the regression analysis didn't reveal a significant influence of decision latitude on health indicators. These results contradict to the basic assumption of the JDC mentioned.

The survey at the second point of measurement with 350 participants has just been completed. Based on both sets of data, we will discuss the appropriateness of the JDC concept, and reflect on practical consequences for the work design of employees working on high work intensity

### **Intentions to leave and exclusion from working life among targets of workplace bullying: A 5-year longitudinal study among a representative sample of the Norwegian workforce**

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#### Purpose

Workplace bullying has long been claimed as a strong precursor of turnover and exclusion from working life. Knowing that both bullying and exclusion from work are often long-lasting

processes, the current study will investigate the claim using a five-year time-lag. More specifically, drawing on the seminal work of Leymann (1992, 1996) it is hypothesized that workplace bullying at one point in time will lead to heightened levels of intention to leave the job, actual leaving the job, and exclusion from working life through sick leave, unemployment, rehabilitation or disability pension five years later.

#### Design/Methodology

A total of 4500 employees, representative of the Norwegian workforce were randomly selected for participation. This yielded response-rates of 56.4 per cent at T1 (2005), 70 per cent at T2 (2007), and 72 per cent at T3 (2010; N=1270). Measures were either single items or well-established scales, and regression analyses are to be performed on the basis of these measures (autumn 2012).

#### Results

Preliminary analyses using hierarchical multiple regression show that self-reported bullying at T1 significantly predicts number of days on sick-leave in the fifth year following T1, as well as intentions to leave the job (T3).

#### Limitations

Variables are measured by self-report. Hence, they are not objective, and may be subject to same-source biases.

#### Research/Practical Implications

The notions of the study imply that bullying may lead to substantial, long-term organizational costs.

#### Originality/Value

The belief that workplace bullying is a precursor of exclusion from working life has rarely been investigated using representative and longitudinal data.

### **Positive workplace interventions: Which resources for employees' health development?**

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#### Purpose

Sustainable occupational health interventions should concentrate not only on identifying and assessing psychosocial health hazards but also on assessing and developing the existing and potential capacities and resources (Bauer & Jenny, 2012). A number of theoretical models conceptualize the relationship between demands and resources at work and several typologies of resources exist. Yet, few studies investigated actions that develop resources and no distinction has been made between resources that protect and those that develop employee's health. The purpose of this study is to identify which resources protect and develop employees' health.

#### Design/Methodology

A mixed methodology combining qualitative and quantitative research methods has been used. A questionnaire was sent to 208 occupational health key actors (managers and human resources managers, occupational health professionals, health and safety managers, members of the committee for health and safety at work, union representatives), of whom 150 (72%) returned the completed forms. Semi-structured interviews were conducted with 80 employees and five focus-group interviews were organized with 39 persons (13 managers, 12 employees and 14 occupational health key actors).

#### Results

Results highlight that employees use mostly personal resources in order to cope with demands at work.

**Limitations**

Data was collected from several organisations.

**Research/Practical Implications**

The paper presents considerations on different actions that promote and develop resources throughout workplace mental health interventions.

**Originality/Value**

The study highlights that resources can protect employees' health, yet not always foster employees' health development.

### **Long term intervention on work-related stress: How do actors and issues change?**

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**Purpose**

Interventions related to the prevention of work stress are often disconnected from the real work and evaluations of their effects can be contradictory (Cox & al., 2010). From the analysis of an intervention initiated over ten years with a large company on these issues, we propose to redefine the relationship between organizational psychology interventions and clinical analysis of the real activity. We seek to articulate how both interventions and clinical analysis are complementary and relevant when jointly mobilized and articulated. We focus on how actors internal to the firm change, notably their representations of stress and their behavior.

**Design/Methodology**

This research is based on the permanent monitoring of stress within the firm through a questionnaire completed by 13 000 workers during their compulsory medical examination. Additionally, six in-depth studies (interviews and observations) were also conducted about specific issues: the workload of engineers, the collective work of buyers, use of email, com-

munication within teams, consequences of the use of english language, partial unemployment.

**Results**

Results show changes among actors of the firm. Their representations of stress and their causal attributions of stress show how a "taboo" issue can become an active behavior towards stress prevention.

**Limitations**

These positive changes, from the point of view of stress prevention are not entirely stable. Newcomers and new organisational transformations (such as the implementation of "lean production") can lead to regressions.

**Research/Practical Implications**

Regarding the number of diagnostics on stress that do not follow by action (Hansez & al., 2009), our research gives some insight to make prevention policies more effective.

**Originality/Value**

Long-term intervention.

### **Workaholism as work craving**

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**State of the Art**

The main modern psychometric models of workaholism (Robinson, 2007; Schaufeli, Shimazu, & Taris, 2009; Spence & Robbins, 1992) focus mainly on descriptive criteria of obsessive-compulsive tendencies for identifying workaholism and do not consider the functional role of emotional processes in maintaining workaholism. Among the criteria commonly used in the literature to diagnose workaholism are two characteristics: on the one hand, obsessive thinking about work, and, on the other hand, repeated efforts to switch off

from obstinate working (e.g., Robinson, 2007; Schaufeli, Shimazu, & Taris, 2009; McMillan & O'Driscoll, 2006). These characteristics highlight that, despite understanding the negative consequences of continued working, workaholics (similar to gamblers) at times experience an overwhelming, often irresistible, craving to engage in a certain behavior, in this case, working. A major stumbling block for craving research in gambling has been the lack of a methodologically sound, multidimensional measure of work-related craving.

#### New Perspective/Contribution

In this presentation, we introduce a conceptualization of craving that functionally explains workaholism as work craving and present the Work Craving Scale (WCS; Wojdyło & Buczny, 2010) as a measure for this construct. We define work craving as a pathological desire for work which comprises besides an obsessive-compulsive component, hedonic and learned components as critical features in work addiction. In analogy to other cravings (cigarettes, gambling), a multidimensional model for work craving differentiates following components: (1) obsessive-compulsive desire for work, (2) anticipation of self-worth compensatory-incentives from work, (3) anticipation of reduction of negative affect (relief) or withdrawal symptoms resulting from working, and (4) neurotic perfectionism. The conceptualization of workaholism as work craving is the new proposition to identify and measure the addictive nature of workaholism.

#### Conclusion and Implications for Research/Practice

The results imply that the WCS scores have acceptable psychometric properties ( $N > 1400$ ; RMSEA = .074, CFI = .975) and can be used in studies on pathological organizational behavior.

We see some incremental value of the Work Craving Scale in comparison to the existing measures of workaholism: the Work Addiction

Risk Test (WART, Robinson, 2007), the Workaholism Battery (WorkBAT, Spence & Robbins, 1992), or the Dutch Workaholism Scale (DUWAS, Schaufeli, Shimazu et al., 2009). In addition to obsessive-compulsive symptoms, the WCS includes the hedonic and learned components inherent in the addiction. The WCS measures workaholism as a craving phenomenon. With our model of work as craving, we argued that three further dimensions are critical for the diagnosis of work addiction: anticipation of self-worth incentives, anticipation of relief, and neurotic perfectionism.

#### Workaholism and health. Consequences of work craving

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#### Purpose

Workaholism is defined as a disorder, which is manifested in over-average energy exhaustion, perseveration in action, setting standards hard to achieve, and inability to disconnect from task. In the order to measure workaholism as an addiction we used new workaholism measurement method: Working Craving Scale. We assumed that craving to work would consist of (1) obsessive-compulsive desire for work, (2) anticipation of self-worth compensatory incentives from work, (3) anticipation of reduction of negative affect or withdrawal symptoms resulting from working, and (4) neurotic perfectionism. We assumed that workers high in work craving are focus on work and actions related to work and consider their own health as less important than work. This may lead to less pro-health behaviors, eating junk food and physical symptoms: headaches and low level of physical stamina. Thus we hypothesized that work craving is related to health problems, low engagement in health-related behaviors, and unhealthy eating habits.

**Design/Methodology**

In the order test hypotheses we tested four samples of workers (N = 413). Questionnaires were administered on papers at the participants' workplace.

**Results**

Correlational analyses fully confirmed the hypotheses.

**Limitations**

It's not clear whether low engagements in pro-health behaviors lead to physical problems or the causal order is reversed.

**Research/Practical Implications**

Results could be used to prevent deteriorations in health behaviors at working place.

**Originality/Value**

We operationalized workaholism as work craving showing its consequence for well-being.

**Promoting the social inclusion of people with mental disorders: the role of social enterprises**

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**Purpose**

The purpose of this study is to enhance understanding of the efficacy of the social enterprise model in decreasing stigma and promoting social integration among people with mental illness.

**Design/Methodology**

310 individuals with mental disorders employed in Italian social enterprises took part in the study and filled out a battery of questionnaires on individual and environmental variables. Individuals who were still eligible at the 12-months follow up phase of the study

(N=131) completed a battery of questionnaires on social skills and stigma.

**Results**

We used path analysis to test a model delineating how working in social enterprises improves vocational outcomes and social skills in mentally ill people. Results show that, by providing meaningful work experience - which help mentally ill individuals increase their work-related and social skills - working in social enterprises lead to a reduction of perceived stigma and discrimination.

**Limitations**

Findings of this study are somewhat limited by the fact that data come from self-reports of illness and vocational outcomes. It would have been relevant to have included the perspective of other important informants, such as the supervisor or co-workers, especially on the environmental characteristics.

**Research/Practical Implications**

Social enterprise provide a context in which mentally ill people experience success and sense of work-related and social competence, which in turn helps them reduce perceived stigma and discrimination, that is a crucial step toward social inclusion.

**Originality/Value**

To our knowledge, no studies have been conducted yet to better understand the effectiveness of the social enterprise model on promoting social inclusion in people with mental illness.





# 4. Worktime arrangements and work-family interface

## Symposia

### Boundaryless Work (Worktime- and Workplace Flexibility): Pain or Gain?

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A flexible work arrangement that gains popularity within contemporary organizations is 'Boundaryless Work' (BW): A combination of high employee worktime control and spatial flexibility, with employees being able to self-decide when and where to work. BW is generally expected to aid to a better work-life balance and recovery, as it allows employees to align their working times with their obligations in private life, and enables employees to stop working before becoming too fatigued. These time- and recovery-regulation mechanisms are in turn theorized to result in improved employee well-being and performance. From a more critical perspective, however, one can also theorize that BW will have a negative impact on employee well-being: As BW generally coincides with an increased emphasis on output management, it may result in higher job demands and overtime work, and consequently less time for recovery, and more diffi-

culties with psychological detachment from work. Considering the above, an important role for researchers lies in elucidating the actual effects of BW. As yet, our understanding of these processes is still limited.

With this symposium, we aspire to provide insight into contemporary scientific research and knowledge on BW. By presenting five international studies, we aim:

1. to clarify and empirically test theoretical groundings for the presumed association between BW and well-being / performance.
2. to stimulate knowledge on 'process factors' and 'moderating factors' that determine why and when BW is associated with either favourable- or adverse effects.
3. to present and compare several possible research designs and methodologies within BW-research.

### Presentations of the Symposium

#### Benefits of employees' actual use of HR-practices associated with new ways to work and boundary management strategies: Towards a conceptualization of new ways to work

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This study examined the relationships between 'employees' use of HR-practices associated with New Ways to Work (NWW), 'employees' boundary-management strategy' (degree of work-life and life-work integration), and the 'discrepancy between their enacted and preferred boundary management strategy' ('too much integration'), on the one hand, and a set of work outcomes (work engagement, affective organizational commitment,

positive and negative work-home interference), on the other. A six-dimensional NWW-measurement-instrument was developed and psychometrically validated, comprising: 1) empowered behavior regarding own work [1a) autonomous behavior and 1b) responsible behavior regarding targets and deadlines]; 2) empowered behavior regarding teamwork [2a) 'intra-preneurial behavior' and 2b) responsible behavior regarding team work]; 3) flexible behavior with regard to where, when and with whom one works; and 4) knowledge sharing behavior among peers through the use of IT. Combining insights from the Process Model of SHRM and the Job Demands-Resources Model, hypotheses were tested using empirical data from knowledge workers (N = 147) in four organizations having implemented NWW practices. Preliminary findings confirmed that the 'use of NWW-practices' can be beneficial for employees and organizations, as it seems to foster positive work outcomes, particularly work engagement. Intra-preneurial behavior was also shown to have the potential to enhance affective organizational commitment and positive work-home interference. However, knowledge sharing through IT had a negative relationship with affective organizational commitment. Moreover, 'too much work-family integration' was shown to have detrimental effects on work engagement, affective commitment and negative work-home interaction, which calls for new organizational boundary-management policies in the context of NWW.

### **Boundaryless work: Understanding paradoxical outcomes**

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This paper examines the sometimes paradoxical effects of flexibility of working time and place. Initiatives which allow employees some degree of choice over where and when they

work are generally designed to assist them achieve a better work-life balance. However, some studies have found that sometimes they can result in work intensification and can be a source of stress for employees.

In this paper findings are presented from a study of the implementation of flexible working in 3 large organisations. It draws on data gathered from flexible workers, both by means of semi-structured interviews and by an on-line questionnaire.

The findings show that being able to exercise some degree of choice over their work arrangements, normally assists employees achieve a better work-life balance and was positively received by employees. However, it was also found in some cases to result in both quantitative and qualitative work intensification and to represent a source of stress. Furthermore, the findings suggest these negative effects may be more pronounced when employees exercise discretion over working time and work place simultaneously.

If organisations wish to reap the benefits from flexible working, there is a need to fully consider the implications of changes to working practices. There is a need to think through how adequate existing policies and procedures are for employees working on different work patterns.

The paper attempts to make a contribution by shedding light on how the relationship between boundaryless work and different outcomes operates.

**Worktime and workplace flexibility in relation to work-related recovery: A study at the day-level.**

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Control over worktime and workplace is generally believed to support modern, ICT-facilitated employees by giving them additional options for dealing with high workload. This study aims to add to on-going research by taking a day-level approach. It investigates the hypothesized moderating role of worktime and workplace control in the workload-job strain relationship across two working days in the office and two working days at home. Data were collected among 120 flexible workers by 5 master thesis students, using their own social network to identify suitable respondents. Respondents completed a survey and 4 daily diaries. Separate analyses were performed for each of the four days investigated.

Office days were accompanied with higher workload and need for recovery, as well as lower psychological detachment. Day-level need for recovery and psychological detachment were the dependent variables, controlling for general levels in these outcomes based on the survey. Day-level workload was a strong predictor of high need for recovery and low psychological detachment on office as well as home days. Contrary to expectations, high worktime and workplace control was associated with high need for recovery. High worktime and workplace control and high workload showed an interaction effect on psychological detachment (decrease) on office days, which is also contrary to expectations.

These results suggest that among employees enjoying worktime and workplace flexibility the effects of having more of such flexibility on work-related recovery may not be as straightforwardly positive as is commonly believed.

**Boundary management strategies and work-life balance in knowledge intense, boundaryless work**

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Boundary strategies, segmentation and integration, were explored in knowledge intense, boundaryless work. Socio-demographic, work-related and individual factors were investigated in relation to strategy choice, and further, which of these factors that discriminated between succeeding or not with the chosen strategy. Moreover, work-life balance was studied in relation to strategy choice.

A questionnaire was sent to employees (n=1238, response rate 65%) at an international telecom company in Sweden.

A majority, 82 percent, chose segmentation. Integrators had higher working time per week, more often worked evenings and weekends and at different places than the workplace, especially from home, than segmenters. More integrators perceived their strategy as non-successful. However, these time- and place related aspects were only related to not succeeding with one's strategy among segmenters. Especially, co-habiting women with children choosing segmentation perceived their strategy as non-successful. In contrast, male segmenters succeeded more often. Discriminating factors in both strategy groups reflected the capacity for self-regulation, i.e., being able to say no and set limits, organizing work efficiently, and work independently. Those who succeeded with the integration strategy, in particular integrating women, reported a higher degree of work-life balance as compared to others.

Results needs to be confirmed in other work settings and associations between boundary management and stress and health established.

Self-regulation seems a crucial competence in a working life characterized by boundarylessness. Results are of value for health promotion in flexible work organizations in supporting employees achieving successful boundary management and subsequent work-life balance.

### **An intervention study on boundaryless work: Consequences for work characteristics, well-being and performance**

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The aim of the project is twofold: First, we provide insight in the effects of Boundaryless Work (BW) on work characteristics (e.g., autonomy, work demands, social contact) and indicators of employee well-being (e.g., stress and vitality) and performance (e.g., OCB and in-role performance). Second, we aim to identify important moderators (e.g., personality, attributions) as well as mediating mechanisms (e.g., work-nonwork balance and recovery) in this association.

We employ a high-quality intervention design that entails: two pre-measures (6 and 2 months before implementation of BW); three follow-up measures (respectively 4, 10 and 16 months after implementation of BW); and comparisons of intervention- and control groups. This approach permits examination of short-term and long-term effects of BW on work characteristics, well-being, and performance.

Data collection is currently in progress, among a sample of about 1500 employees. At the symposium, we will present preliminary findings that concern short-term effects of BW.

The project is among the first studies to longitudinally assess the effects of BW by applying a high-quality intervention design.

## **Enhancing Work-Life Balance in Times of Change: Challenges for Employees and Employers**

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### **State of the Art**

The world of work is changing. More and more organizations allow/ask employees to be flexible in where and when they work and there is trend towards more temporary work. These changes may generate threats as well as challenges for employees' work-life balance (Gajendran & Harrison, 2007). However, to date little is known about the strategies that individuals can employ to manage these changes, and the role the work context plays in this regard. What boundary management strategy works best, and does co-worker support help to foster work-life balance?

### **New Perspectives/Contributions**

This symposium aims to examine the implications of telecommute arrangements and temporary work for employees' work-life balance, and how these changes can be managed. In the first contribution, Peters will present how telecommuting and boundary management relate to conflict and enrichment. Second, Van Steenbergen will focus on the consequences over time of transitioning from part-time to fulltime telecommuting for conflict and enrichment, moderated by self efficacy and boundary management. Third, based on longitudinal data, Mauno will examine differences in conflict and enrichment between temporary workers and permanent workers. Fourth, Lapierre will discuss how coworkers, by role-modeling, can improve employees' success in balancing multiple roles. Finally, the importance of achieving work-life balance is underscored for employees' engagement in volunteer work and their well-being, in presentations by Brauchli and Rantanen respectively.

### Research/Practical Implications

This symposium offers advanced insight in beneficial and detrimental implications of changes in the way of working for work-life balance, and different ways in which employers and employees can master the challenge of enhancing balance.

### ***Presentations of the Symposium***

#### **Bounded flexibility: The influence of time-spatial flexibility and boundary management strategy on the work-life balance of women workers**

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#### Purpose

Employing the Job Demands-Resources Model as a theoretical framework, this study aims to contribute to the work-life balance and flexibility debate by analyzing the relationships between Dutch working women's use of work-related time-spatial flexibility and segmentation as a boundary-management strategy (i.e., limiting work-life and life-work interruptions), on the one hand, and work-life balance (time-based, strain-based and positive work-home interference), on the other, and how segmentation moderates the relationship between time-spatial flexibility and work-life balance.

#### Design/Methodology

Multiple regression analyses were conducted using data collected in 2011 by means of an e-questionnaire among employed and self-employed Dutch women (N=448) registered at a work agency for virtual work.

#### Results

Time-spatial flexibility and the two segmentation types were shown to have negative relationships with both time and strain-based work-home interference. However, the rela-

tionship between time-spatial flexibility and negative work-home interference was not moderated by segmentation. Furthermore, flexibility and segmentation did not affect positive work-home interference.

#### Limitations

The study mainly comprised highly educated, for a large part part-time working Dutch women. Future research could focus on other labor-market groups, in different national contexts.

#### Practical Implications

It was concluded that both flexibility and segmentation have the potential to help women workers to improve their work-life balance, and, therefore, organizations and women employees may gain from developing 'bounded flexibility strategies.'

#### Originality/Value

The study focused on two seemingly contradicting concepts: flexibility and segmentation. Moreover, it applied recent insights regarding boundary management by distinguishing between two types of segmentation strategies. Moreover, it included both employed and self-employed women.

#### **Transition from part-time to fulltime telecommuting: Will employees' work-family balance be affected?**

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#### Purpose

Many contemporary organizations offer telecommute arrangements which allow employees to work a proportion of their time from home or elsewhere on hours that suit them. Most studies report positive effects of such part-time telecommute arrangements for employees' work-family balance. However, what happens when an organization transiti-



ons to fulltime telecommuting to obtain further cost-reductions? To date, very little if anything, is known about fulltime TC. This study examines the consequences for employees' work-family and family-work conflict and enrichment when employees transition from part-time telecommuting to working from home fulltime, moderated by boundary management strategies and work-family self-efficacy.

#### Design/Methodology

Longitudinal survey data was collected at three points in time among sales employees of a financial services organization ( $N = 133$ ). T0: before the transition; T1: 3 months after the transition; T2 one year after the transition.

#### Results

As predicted, an overall deterioration of experienced work-family balance occurred. Employees who segmented roles, and those with greater self-efficacy experienced less deterioration of work-life balance.

#### Limitations

It is unknown if these findings generalize to other organizations and other than sales force employees.

#### Practical Implications

These findings suggest that organizations should be careful when considering a transition to fulltime telecommuting, as employees experienced considerable costs. Prevention of these problems can be sought in enhancing self-efficacy and self-management skills.

#### Originality

This is one of the first longitudinal studies on telecommuting. Moreover, previous studies have never considered a transition to fulltime telecommuting.

### **The effects of work-family conflict and enrichment on employee outcomes: Comparing long-term temporary vs. permanent workers across three waves**

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#### Purpose

This study investigated whether the effects of work-to-family conflict (WFC) and work-to-family enrichment (WFE) on employee outcomes (turnover intentions, job exhaustion, somatic symptoms) varied by the type of job contract.

#### Methods

We utilized three-wave data collected in the Finnish university employees in three consecutive years. The participants were either permanently ( $n = 297$ ) or temporarily ( $n = 318$ ) employed for the whole three-year period.

#### Results

High WFC was more harmful for permanent than temporary employees: high WFC showed a lagged effect on increased turnover intentions and somatic symptoms in permanent employees. Temporary employees, in turn, benefited more from high WFE, which showed a lagged effect on reduced job exhaustion and somatic symptoms among them. Thus, job contract moderated the lagged effects of WFC and WFE on the studied outcomes. Furthermore, mean variations were found in WFC and WFE: permanent employees reported more WFC and WFE during the follow-up.

#### Limitation

Only one type of temporary contracts was examined (fixed-term contract) and in one sample (university).



**Practical value**

Organizations employing both temporary and permanent workers should consider that they may experience work-family interface differently, and that this may also have different long-term outcomes.

**Originality**

Work-family interface (via WFC and WFE) has rarely been studied from the perspective of the type of job contract and previous studies have not been longitudinal.

### **Family-supportive coworker behaviors: Implications for work-family conflict**

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**Purpose**

To test whether the degree to which employees' coworkers are supportive of their personal (family) demands and obligations relates negatively with employees' experience of time-based and strain-based work interference with family and family interference with work.

**Design/Methodology**

A field (correlational) study was used. Data were collected from 109 employees from multiple organizations. Family-supportive coworker behaviors (FSCBs) were measured by adapting Hammer and colleagues' (2009) family-supportive supervisor behaviors (FSSBs) scale, which includes subscales for emotion-focused support, instrumental support, role modeling, and creative work-family management. The items were changed to reflect behavior among coworkers rather than supervisor behavior. Work-family conflict was measured using Carlson, Kacmar, and Williams (2000) multidimensional measure. Control variables included FSSBs and general support from coworkers (using Caplan and colleagues' (1980) four-item measure).

**Results**

Results indicate that the more coworkers served as role models in the way they effectively managed work and personal obligations, the less employees reported experiencing time-based family interference with work.

**Research/Practical Implications**

This is the first study to examine specific types of FSCBs in relation to employees' work-family conflict. These preliminary results imply that coworkers, by role-modeling how they personally balance work and family demands, can potentially improve employees' success preventing family obligations from interfering with their work.

**Originality/Value**

This is the first study to examine specific types of FSCBs in relation to employees' work-family conflict. It builds upon previous research that has focused on general coworker support (not family-focused) or has used very general (non-specific) measures of family-focused coworker support.

### **Work-home gains: Understanding the spillover from work-related wellbeing to voluntary work**

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**Purpose**

Voluntary work creates public as well as individual benefit: it improves community life by creating a healthy community and it fulfills someone's basic need to "give something back" and to help others. It is therefore important to understand underlying factors that might facilitate voluntary work. In the present study, we assume that the relation between

work-related wellbeing and voluntary work can be explained by gains that spill over from work to home, namely work-home gains (work-home enrichment minus work-home conflict).

#### Design/Methodology

To investigate our assumptions we analyzed data from a cross-sectional questionnaire survey that has been conducted within 4 industrial companies (N=2,014).

#### Results

Consistent with our expectations, structural equation modeling revealed that there exists an indirect relationship from work-related wellbeing via work-home gains to voluntary work.

#### Limitations

Only quantitative aspects (frequency) of voluntary work were assessed using a single-item measure.

#### Implications

It seems that the better employees are feeling at work, the better they are able to integrate their work and their home lives and, as a result, the more frequently they engage in voluntary work. Thus, the spillover process from work to voluntary work can be explained by work-home gains.

#### Originality/value

By investigating the spillover process from paid work to voluntary work this study integrates an under researched life domain, which is not only important for individuals but also for society as a whole.

### **Types of work-family balance and well-being examined among Finnish and Slovenian nurses**

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#### Purpose

Work-family balance (WFB) is typically approached from a variable-oriented view which neglects the importance of combined experiences of work-family conflict and enrichment on individuals' well-being. Thus, we tested a typological, person-oriented view on WFB (Grzywacz et al., 2008; Rantanen et al., 2008, 2011) to see which combinations of conflict and enrichment are most beneficial vs. harmful for individuals.

#### Design and methods

We utilized two datasets consisting of Finnish ( $n = 662$ ) and Slovenian ( $n = 667$ ) nurses. The different types of WFB (consisting of work-family conflict and enrichment experiences) were examined with latent profile analysis.

#### Results

In both samples three types of WFB emerged: Beneficial (higher work-family enrichment than conflict), Active (nearly equal levels of work-family enrichment and conflict) and Contradictory (high conflict and low enrichment in work-to-family direction, and high enrichment and low conflict in family-to-work direction). The beneficial type reported lowest exhaustion, highest vigor and highest life satisfaction. In addition, in Finnish nurses the Contradictory type reported higher life satisfaction than the Active type, and in Slovenian nurses the Active type reported higher vigor at work than the Contradictory type.

#### Limitations

This study is based on self-reports and a female-dominated occupational group.

### Implications and originality

The results support the theoretical idea that WFB is not a single state or continuum but instead manifests itself in many forms. The fact that the WFB types were very similar between nurses from two very different European countries underlines the generalizability of these types and encourages further research.

## Position Papers

### **Integrative Perspectives of Occupational Fatigue - Contributions from Organizational Neurosciences**

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#### State of the Art

In spite of the applied relevance of occupational fatigue to a variety of activities and industries, a consensus and rigorous definition of the concept still has to be formulated (Matthews, Desmond, Neubauer & Hancock, 2012). Hockey (2011) extends this view and argues that despite the work developed in the last 100 years, a consolidated theory of fatigue, its origins and functions has yet to be proposed.

This paper considers occupational fatigue as the fatigue resulting from work activities (i.e., work activities which main components involve physical and psychological processes) and the working conditions under which these are performed (e.g., working conditions, temporal organization, workload, work rhythms).

The variety of antecedents and mediators of occupational fatigue may help to understand the paradoxes associated with the topic. The paper will organize previous research in three main areas: Sleep deprivation, sleep disturbances and activities performed.

Sleep deprivation regards the number of hours slept in the last 24 hours and is associated with concepts as sleep debt, chronic and

acute fatigue as well as a variety of consequences as sleepiness, somnolence or drowsiness. Regardless of the concepts adopted, research highlights the individual consequences of work schedules and, in particular, night work.

Although sleep disturbances result from changes introduced in the sleep cycle, the literature has demonstrated the repercussions in other circadian rhythms such as the endocrine systems. From the operational perspective, research has underlined that these disturbances are no longer restricted to shift work but are a direct result of the 24 hour society where long working hours appear to characterize the working population (D'Oliveira & Marques, 2009; D'Oliveira, 2011).

Research on the activities performed has suggested the relevance of a variety of factors such as job control and autonomy (Karasek, 1979) or monotony and complexity (Harrison & Horne, 2000).

The appealing nature of the topic has stimulated research in a variety of disciplines such as biology, medicine, psychology, management and neurosciences. Although the diversified scientific inputs are most welcomed, the integration of results and its incorporation in applied countermeasures has yet to be materialized.

The evaluation of occupational fatigue is divided in two main disciplinary approaches: biological sciences and social/psychological approaches. Although both consider data from work schedules, (i.e., night work, regular schedules, duration of a working, early starts), biological sciences center their research on physiological measures as cardiovascular activity and responses from endocrine systems while social/psychological approaches base their studies on self-reporting measures as *Fatigue Scale* (Chalder et al, 1993), *Fatigue Assessment Scale* (FAS) (Michielsen et al,

2004) or the *Checklist Individual Strength* (CIS) (Bültmann et al, 2000).

As a result, occupational fatigue is associated with a fragmented and disciplinarily biased state of the art.

The paper will also consider the few exceptions to such theoretical background as the Model of Compensatory Control by Hockey (1997, 2011) where both physiological and psychological approaches are considered in the regulation of individual effort. According to the model, effort is at least partially under the control of the individual and may be increased by task interest, task engagement, reward system or the negative consequences of performance decrements. The study and monitoring of these factors is instrumental in the understanding of the physiological and psychological markers of occupational fatigue.

#### New Perspective/Contribution

Following the presentation of the state of the art and a critical analysis of the multidisciplinary literature on fatigue, the paper discusses the potential contributions of organizational neurosciences. By combining psychological, behavioral and physiological approaches, the paper proposes an integrative approach to occupational fatigue that may help to understand behaviors and physiological changes and the potential compensatory or buffering factors in the working population.

Three main propositions will be considered:

#### 1. Integrative approach of occupational fatigue

The literature on fatigue may be describe as fragmented with controversial definitions and models that result in incoherent, divided and scientifically biased perspectives. The paper proposes that the integration of multidisciplinary approaches is instrumental in the development of effective mitigating strategies.

#### 2. Consilience in the evaluation of occupational fatigue

A variety of markers has been adopted in the study of occupational fatigue namely subjective behavioral reports, sleep logs, work schedules, endocrine changes, and cardiovascular activity, among others. The paper proposes that consilience or agreement in the identification of markers is central to the development of an integrative model of fatigue. In this regard, it is proposed that organizational neurosciences may provide a substantial contribution.

#### 3. Integrated mitigating strategies

Finally, fatigue modeling systems have been proposed in several high reliability environments as the aviation industry. However, such approaches only consider the consequences of sleep deprivation and disturbances. Although research has identified a variety of antecedents, the benefits of these mitigating strategies are constrained by their restricted conceptual approach to occupational fatigue. As proposed by Smith (2011) the development of effective auditing instruments or methodologies must incorporate a variety of markers and cannot be restricted to potential disturbances of circadian rhythms.

The paper adopts a multidimensional approach to fatigue that involves both physical and psychological fatigue. In order to capture the multiple repercussions of fatigue, it is proposed that a variety of markers has to be adopted that includes subjective reporting measures (e.g., CIS - Checklist Individual Strength), behavioral records (e.g. alertness, memory and vigilance data) and psychophysiological indicators (e.g., endocrine markers as cortisol and melatonin, and cardiovascular activity).

The buffering effect of working conditions (e.g., teamwork) or the compensatory effect of task characteristics (e.g., task engagement) need to be considered in order to fully understand occupational fatigue.

It is this integrative approach to occupational fatigue that may contribute to the development of effective mitigating strategies thus contributing to healthier work organizations.

#### Conclusion and Implications for Research/Practice

The integrative approach to occupational fatigue has clear implications for research and practice. By framing occupational fatigue within organizational neurosciences, the model presented proposes the integration of distinct disciplinary traditions and the combination of markers (i.e., subjective, behavioral and physiological). As a direct consequence, the integrative nature of the model strongly contributes to an increased operational validity of mitigating strategies.

### Single Papers

#### **Lack of support or lack of skills? Comparing the work-life-learn-balance of non-traditional students at European universities**

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##### Purpose

As a response to the associated shortage of skilled workers, professionals must become further educated by entering or returning to higher education, but achieving a balance between work, study and family remains an obstacle. According to Lowe and Gayle (2007), support from universities, employers or families could help to maintain a good work-life-learn balance (WLLB). It is hypothesised that in addition to support, these students need

skills in self-regulated learning and coping strategies.

##### Design/Methodology

In an international survey, employed students from Denmark, Finland and Germany were tested to assess their satisfaction with their WLLB (dependent variable), self-regulative learning, coping strategies and received support (independent variables). Correlation and regression measures were calculated to analyse the relationships.

##### Results

Outcomes indicate a generally low satisfaction with WLLB and coping strategies as being a mediator. Interesting differences between the universities have been revealed regarding perceived support and self-regulated learning skills. These are seen to be connected to the differing university models but also to the levels of support from employers.

##### Limitations

Only students from one institution in each country were tested, and, therefore, future research is needed to ensure generalizability. But each university has an innovative concept for the target group of employed students. Despite its limitations, the paper will give interesting insight into the structure and successes of open university models.

##### Originality/Value

WLLB is a relatively new topic and has not yet been much researched in a European context. Results demonstrating the value of support and coping skills will provide employers and universities with insights for future support structures.

#### **A longitudinal study on work-family conflict and turnover intentions**

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**Purpose**

Researchers have become increasingly interested in the potential outcomes of work-family conflict. Work-family conflict – the extent to which work and family roles interfere with each other – is posited to be bidirectional: work can interfere with family (work-to-family conflict; WFC) and family can interfere with work (family-to-work conflict; FWC). In regard to potential outcomes, there is an ongoing debate about whether the primary effect of WFC and FWC lies within the domain where the conflict originates (matching-hypothesis) or within the other domain (cross-domain relationships). The aim of this study is to contribute to this debate by examining whether WFC and FWC predict increases in turnover intentions over time and testing whether support from different domains (work and family) mitigates these relationships.

**Design/Methodology**

625 employees from a German company participated in a longitudinal study with two assessments (six months apart).

**Results**

Increases in turnover intentions were predicted by WFC but not by FWC. The positive relationship between WFC and turnover intentions was mitigated by support from the work domain but not by support from the family domain.

**Limitations**

Whether these results generalize to non-profit organizations and non-Western cultures remains to be tested.

**Research/Practical Implications**

The results imply that WFC is more important in predicting increases in turnover intentions than FWC, thereby supporting the matching hypothesis. Organizations should reduce employees' WFC to diminish turnover intentions.

**Originality/Value**

This study examines WFC, FWC, and support from different domains (work and family) in predicting increases in turnover intentions thereby shedding light on the debate about matching- vs. cross-domain relationships.

**Boundary management and work-family enrichment: Antecedents, consequences and the role of psychological detachment**

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**Purpose**

Building upon Boundary Theory (Ashforth, 2001), the present longitudinal study aims at investigating the beneficial effects of integrating the work and the family domain on the work-family interface. We hypothesize that there is a positive relationship between an employee's preference to integrate work into the family domain and work-to-family enrichment, specifically for employees who indicate low psychological detachment from work during non-work time. We propose work absorption as an antecedent of an employee's preference to integrate work into the family domain. Finally, we investigate work absorption and job satisfaction as favourable consequences of work-to-family enrichment.

**Design/Methodology**

We gathered our data from different organizations at two measurement points with a time lag of six months by an online survey of employees having at least one child (N = 207).

**Results**

Multiple regression analyses with mediation analyses following a bootstrapping approach (Preacher & Hayes, 2008) provided support for all of our hypotheses.

**Limitations**

We assessed all constructs by self-report measures. Future research might want to replicate



our findings by using additional ratings from other sources (e.g., spouses).

#### Research/Practical Implications

Our results point out that integrating work into the family domain can have beneficial effects for both the employee and the organization. Moreover, our findings challenge past research on the positive relationship between high psychological detachment and favourable outcomes.

#### Originality/Value

The present study is the first that investigated the long-term effects of integrating work and family domain on work-family enrichment by additionally taking psychological detachment as a boundary management practice into account.

### **Linking daily interpersonal conflict and work life conflict: The buffering effect of personal resources**

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#### Purpose

Interpersonal conflicts at work imply time and energy loss, which in turn can impact perceptions of work-life conflict (WLC) on a daily basis. However, employees have personal resources that can protect them from these demands, helping them to better cope with conflict and control their environment successfully. Building on the Job Demands-Resources model, we hypothesize that personal resources (i.e. optimism and resilience) will buffer the daily negative consequences of interpersonal conflict at work (i.e. task and relationship) on WLC.

#### Design/Methodology

113 employees from different organizations in Spain filled in a general questionnaire and a daily questionnaire once a day, during five consecutive working days.

#### Results

Multilevel analysis conducted with HLM showed that resilience buffers the negative effect of task and relationship conflict on WLC, whereas optimism buffers the negative effects of relationship conflict on WLC. Our findings indicate that personal resources are important to cope with interpersonal conflict at work and can reduce its negative impact on private life.

#### Limitations

Paper-and-pencil data collection embeds risks of uncertain compliance from participants. Information was based on self-reports, which could relate to common method biases. Research/Practical implications

#### Research/Practical Implications

Our findings highlight the buffering role of personal resources on the relationship between job demands and work-life conflict. As such, findings suggest the importance of helping employees to build on their personal resources for a better work-life balance

#### Originality/Value

These results contribute to expand the Job Demands-Resources model and the scope of WLC antecedents by highlighting interpersonal conflict as a relevant demand and providing empirical support for the moderating role of personal resources.

### **Work-life enrichment - A regulatory focus perspective**

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#### Purpose

Nowadays research concerning the work-life-interface is in great demand. Although the negative side of work-life-interaction is well understood, the positive side is not. We therefore analyzed factors leading to work-life-

enrichment, which is defined as a transfer and application of domain-specific resources to the other domain. Thereto, the work-life-enrichment theory (Greenhaus & Powell, 2006) was combined with the regulatory focus theory (Higgins, 1997). The latter proposes that people with a high promotion/prevention focus will both be interested in the same goal: doing a good job. Although they differ in the strategies how to reach this goal, both types generate resources for goal achievement. Therefore, we hypothesized that regulatory focus relates positively to work-life-enrichment.

#### Design/Methodology

To test our assumptions, we conducted an online-survey ( $N=211$ ) with participants from different job branches (minimum 19 working hours/week).

#### Results

Hierarchical regression analyses showed that people with a high prevention/promotion focus experienced greater enrichment. Our interpretation is that both prevention and promotion focus lead to a generation of resources in one life domain which are transferable into the other domain.

#### Limitations

It remains to be tested if people with a high regulatory focus indeed possess more resources or if they are just more aware of their existence.

#### Research/Practical Implications

Our initial results suggest that the motivation for goal achievement in one life domain may lead to a greater transfer and application of resources to the other domain.

#### Originality/Value

To our knowledge, this study is the first to combine the theories of work-life-enrichment and regulatory focus with the aim of identifying

factors that influence the extent of enrichment.

### **Work-family goals and satisfaction in couples: What is good for her might be less good for him**

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Goals are mental representations of internal states that guide behavior (Gollwitzer & Moskowitz, 1996). Important and attainable goals influence life and relationship satisfaction positively (e.g. Brunstein, 1993), whereas most adults describe goals in the work and family domain as especially important (Cinamon & Rich, 2002). Traditional socialization patterns assign the family role predominantly to women's and the work role predominantly to men's responsibility (Ridgeway & Correll, 2004). Thus, family and work goals may have different impacts on women's and men's life and relationship satisfaction. Specifically, we hypothesize that important and attainable family goals have stronger impact on women's satisfaction outcomes, whereas important and attainable work goals have stronger impact on men's satisfaction outcomes. Furthermore, in couple's work and family goals are closely interrelated (Parasuraman & Greenhaus, 2002). Thus, own work and family goals might also influence the partner's satisfaction outcomes. We investigated a Swiss sample of 112 parents, using the actor-partner interaction model (Kenny, Kashy & Cook, 2006). Results show that for women, attainability of work and family goals is positively related to their life and relationship satisfaction. For men, importance and attainability of work, but not family goals are positively related to their life satisfaction. Furthermore, attainability of their wife's family goals influences their life and relationship satisfaction positively. Results are discussed with regard to recent sociological

developments showing that the work role becomes more equally shared by women and men, whereas the family role persists to be mainly occupied by and attributed to women (e.g. Six-Materna, 2006).

### **Work-life balance policies. The benefits of organizational and supervisor support**

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#### **Purpose**

The purpose of this paper is to analyze the influence (1) of the use of work-life balance policies and (2) of perceived organizational support, perceived supervisor support and family- friendliness in organizational commitment.

#### **Design/Methodology**

The predictions of the relationships among the constructs have been based on relevant literature and have been tested using survey data from employees (N = 830) working in one of the world's largest private energy companies in Germany, which offers its employees a wide range of work-life policies.

#### **Results**

Regression analyses confirm that it is the perceived supervisor support in balancing work and life demands and overall family-friendliness which increases affective commitment.

#### **Limitations**

The nature of the study and its focus on Germany may limit the generalizability of the findings across other sectors or regions.

#### **Research/Practical Implications**

The results underscore the important role that perceived organizational and supervisor support plays for the outcomes of work-life balance policies and indicate the need for European companies to examine the discrepancy

between the visible corporate strategy and the lived organizational culture.

#### **Originality/Value**

This paper focuses on multiple forms of work-life balance policies including flexible work arrangements and general resource services.

To our knowledge, the study is the first to systematically measure organizational and supervisor support specifically in balancing work and private life/leisure time - not reduced to family-life - but including people without family responsibilities.

### **The role of perceived control in flexible working arrangements**

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#### **Purpose**

Supported by new media technologies, nowadays employees can increasingly decide when and where they work. 'New ways of working' (NWW: Ten Brummelhuis et al., 2012) comprise both positive and negative aspects. We argue that perceived control over being flexible – regarding time and place – might influence whether it is perceived positively or negatively.

#### **Design/Methodology**

Semi-structured interviews were conducted with 45 employees, all being part of the 'digital natives' cohort (Bennet et al., 2008). Participants were asked to describe positive and negative situations separately for the NWW components temporal and local flexibility. Next, participants rated to which extent they felt self-determined and externally-controlled in the respective situations. We analyzed data by qualitative content analysis (King, 2004).

### Results

The amount of perceived control distinguished between positive and negative situations. Positive situations were best described by the possibility to define working arrangements in a self-determined way (n=53), facilitating boundary management between work and home (n=10), and career development (n=6). Negative situations were best described by external expectations and interruptions (n=20), workload (n=18), and problems in managing boundaries between work and home (n=14).

### Limitations

Findings of the study are limited to one target group – the digital natives.

### Research/Practical Implications

Results integrated previous evidence about flexibility and work intensity (Kelliher & Anderson, 2010) and assumptions about control (Kattenbach et al., 2010) for digital natives. Practically we suggest creating conditions in which digital natives are supported in their boundary management.

### Originality/Value

To our knowledge, the study is the first which examined positive and negative aspects of NWW among digital natives.

## Testing a process model of family-to-work enrichment

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### Purpose

A recent conceptualization, the work-home resources model, described family-to-work enrichment as a process where family resources may strengthen personal resources, which in turn lead to positive work-related outcomes. Key resources (i.e., personality

traits) may also have an important role in the family-to-work enrichment process as they enable one to optimally employ her or his resources. In line with this model, the aim of the present research was to examine whether self-efficacy mediates the relationship between support from one's family and work engagement (i.e., vigor, dedication, absorption). Further, it was assumed that positive trait-based affect may moderate the relation between family support and self-efficacy.

### Design/Methodology

In order to test our model, a heterogeneous sample of Slovenian employees was utilized (N=738). The mediating and moderating hypotheses were tested using (moderated) structural equation modeling. Bootstrapping was applied to test the mediating effects.

### Results

We found support for a mediating effect of self-efficacy as well as for the moderating role of positive trait-based affect. The indirect effect of the interaction term (between family support and positive affect) on work engagement through self-efficacy was (marginally) significant.

### Limitations

Our study was cross-sectional and based on self-reports only.

### Research/Practical Implications

Future longitudinal studies should test robustness of our results including other personal and key resources (e.g., agreeableness) in the context of family support.

### Originality/Value

Our results broaden the understanding of work-family enrichment processes and provide support for the work-home resources model. In addition, they point to the relevant role of resources in work-family interactions.

### **Getting Engaged: It's more than saying "Yes" to your organization - The effect of work engagement on work-life balance and the moderating role of flexible working**

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#### **Purpose**

Engagement – a positive, work-related state of mind – is an important asset for organizations. Little is known about the antecedents and consequences of engagement in the context of flexible working. The current study aims to give more insight in the relation between engagement, empowerment and work-life balance, moderated by flexible working.

#### **Design/Methodology**

We tested our hypotheses in a study among employees from a large telecommunications company in the Netherlands ( $n = 292$ ), using surveys and interviews.

#### **Results**

The empowerment dimension impact is positively related to work engagement, while self-determination is negatively related to work engagement. High flexible working was related to higher job satisfaction under conditions of low work engagement. Under conditions of high competence, job satisfaction was higher when flexible working was also high, while high self-determination was related to job satisfaction under condition of low flexible working.

#### **Limitations**

While testing the influence of psychological empowerment on work engagement, we were able to use only three of the four dimensions of psychological empowerment, due to questionnaire length restrictions.

#### **Research/Practical Implications**

Our study showed that different empowerment dimensions have different effects on work engagement. It is thus important to discern between the psychological empowerment dimensions in future work. Also, the moderating role of flexible working should be of special interest for those designing HR policies.

#### **Originality/Value**

This study adds to the understanding of the full potential of flexible working in illuminating its moderating role. Moreover, only few studies have examined the influence of psychological empowerment on work engagement and the influence of work engagement on work-life balance.

### **Posters**

### **Become unemployed: How it affects the perception of work-life balance**

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#### **Purpose**

The aim is collect information about the perception of work-life balance on a sample of unemployed, investigating, also, the meanings of work and the discrepancy between the phase of occupation and unemployment in order to observe the change of perception of time devoted to work-family balance in the absence of work and develop the most appropriate instrument to investigate these issues.

#### **Design/Methodology**

Ad hoc questionnaire was administered to 75 subjects. Items were taken from main scales that detect relevant factors in balancing work

and family and proposed to the unemployed: Swing Scale (Geurts, et al. 2005), Carlson Scale (Carlson, et al., 2006), Clark Scale (Clark, 2001), Fisher Scale (Fisher, et al., 2009), items for unemployed from Boerchi, Garavaglia, Rustici (2006) and items for the meaning of work before and during unemployment.

#### Results

T-test analysis showed significant differences in perception of meaning of work before and during the period of unemployment.

The new scale of reconciling work and family for the unemployed identified five factors, the first well-defined (24% of the variance). ANOVA and non-parametric analysis showed correlations with age, working hours, seniority, qualifications and familiar role of respondents.

#### Limitations

The sample size (that is increasing) and the specific origin of the sample cause the non-generalizability of data.

#### Research/Practical Implications

Areas of interest for training activities or support for mobile workers or unemployed by the policies of support to these workers, often abandoned.

#### Originality/Value

The use of a scale for the work-life balance in unemployed workers and the integration with the perception of meaning of work.

### **Predictors of burnout and turnover intentions among a sample of female Romanian healthcare professionals**

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#### Purpose

Job demands and negative work-home interference (NWHI) are relevant burnout antecedents according to the Job Demands-Resources Model (Bakker, Demerouti, & Verbeke, 2004). Literature has systematically linked burnout with turnover intentions (Leiter & Maslach, 2009). Although studies highlighted that burnout and NWHI are more prevalent among female healthcare professionals (Adam, Gyorffy, Susanszky, 2008) few investigated those relationships among female healthcare professionals. Our aim was to assess the specific relationships between job demands, NWHC, burnout and turnover intentions among female healthcare professionals in the Romanian context.

#### Design/Methodology

Cross-sectional data were collected from a sample of 749 female physicians, residents and nurses from three emergency hospitals. Participants filled out the MBI-GS, the Questionnaire on the Experience and the Evaluation of Work, the Survey Work-Family Interaction Nijmegen, and a turnover intention index. All scales had good psychometric properties. SEM with AMOS was used to test the hypothesized model.

#### Results

Results confirmed that job demands and NWHI predict burnout, while burnout predicts turnover intentions and indicated a good fit of the data to the model  $\chi^2(9)=34.934$ , CFI =.986, GFI =.988, AGFI =.954, RMSEA =.062.

#### Limitations

The present research has a cross-sectional design.

#### Research/Practical Implications

Our results have implications for designing interventions focused on reducing burnout and turnover intentions among female healthcare professionals.



**Originality/Value**

The migration of Romanian healthcare professionals to work abroad has become epidemic. Still, there is little official data about the specific factors which shape their turnover intentions. The present research brings evidence about burnout and NWHI' role in shaping turnover intentions.

**Work-Life Balance of Russian office workers: The operationalization and measurement**

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**Purpose**

The purpose of this study is to create and validate the work-life balance questionnaire on Russian sample of adult workers.

**Design/Methodology**

Based on literature analysis we created a definition of WLB, which, as we suppose, fits the Russian workspace reality best: WLB is the state of personality which is gained by deliberate time- and space-management and characterized by one's satisfaction with his or her working and non-working life.

**Methods**

We created a three-scales 30 Lykert-scale items questionnaire: deliberate time- and space management, work satisfaction and overall life satisfaction. For validization we used the work satisfaction scale by Rozanova and Diner's Satisfaction With Life Scale (SWLS) (both in Russian) and interview. Also we included few questions concerning some basic information about subject's work, family and hobby.

**Sample**

289 subjects (103 man and 189 women), with full-time work experience not less than 3 years.

**Data analysis**

Item response theory (rating scale model), confirmatory factor analysis, correlation analysis.

**Results**

The WLB questionnaire we created proved to be a good measurement instrument for Russian sample (Chronbach's Alpha – 0,79; satisfying IRT statistics and model fit indices for CFA). Also we proved the significant correlations with work satisfaction scale and SWLS.

**Limitations**

The norms and interpretations were created only for full-time office workers. The use of questionnaire on other samples requires additional psychometric work.

**Research/Practical Implications**

The Work-Life balance questionnaire can be used for research purposes, in career consulting and in organizational assessment.

**Originality/Value**

This is the first questionnaire of this kind on Russian language.

**Teamwork as a mitigating strategy of occupational fatigue**

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**Purpose**

In addition to work schedules, the nature, duration and rhythm of activities performed may be consider a major antecedent of occupational fatigue. The main objective of this study is to explore the mediating role of the social environment, and in particular teamwork description, on the relation of task characteristics and occupational fatigue.

#### Design/Methodology

A total of 1605 participants with diversified personal characteristics were invited to participate in this study. Fatigue was evaluated with CIS (Checklist Individual Strength), an adaptation of the JCQ (Job Content Questionnaire) was adopted to describe task characteristics and teamwork was assessed with the markers proposed by Aubé e Rousseau (2005).

#### Results

Through the use of structural equation modeling, the relations between task characteristics and fatigue were analyzed and the mitigating effects of teamwork namely higher cooperation explored.

#### Limitations

Self-reporting measures have been considered essential in the study of buffering or compensatory effects on fatigue. However, common method variance may be a consequence of use of these measures.

#### Research/Practical Implications

Contemporary demands of the 24h society make occupational fatigue a major consequence of work schedules. The paper explores how organizational interventions associated with task characteristics and teamwork may constitute effective mitigating strategies.

#### Originality/Value

The paper considers other sources of occupational fatigue other than work schedules and night work. In particular the engagement resulting from task characteristics and buffering effects of teamwork are considered.

### **Everyday work-family interference: A diary study on dual-earner couples' work-family and family-work conflict**

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#### Purpose/Originality/Value

This on-going study examines the interaction between partners' experiences of work-family interference, that is, work-family conflict and family-work conflict. We study how one partner's experienced work-family and family-work conflict relate to the other partner's experiences of the work-family interference, and how this affects their well-being and performance. The present study contributes to the research domain in two ways. First, we focus on the role of one's partner in experiencing work-family and family-work conflict, whereas most studies concentrate on individual, job or overall family characteristics. Second, we approach work-family interference as a dynamic concept and focus on day-to-day variations within dual earner couples.

#### Design/Methodology

We developed a daily questionnaire (e.g., work-family conflict, family-work conflict, well-being, performance, partner's support), which has to be completed during ten consecutive days (weekend included). We already collected data from 18 dual earner couples and have an agreement to participate from approximately 30 additional couples. Data collection will be finished by November 30<sup>th</sup>, 2012.

#### Results

Since the data collection is not finished, it is not possible to present any results yet. However, we will certainly be able to present the final results during the EAWOP conference in May 2013. This will allow us to receive comments on this new line of research within our research group.

### **Investigating the effect of family-work conflict on decreased extra-role behavior at work**

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### Purpose

For the majority of employed adults, family roles constitute important responsibilities that vie for their time, attention, and emotional resources. Role conflict ensues when individuals cannot satisfy family and work roles equally. We investigated the degree to which family demands interfere with work responsibilities. Specifically, we examined whether such role conflict results in employees decreasing their organizational citizenship behaviors (e.g., working overtime, helping coworkers).

### Design/Methodology

Participants were 789 employed young adults (51.5% male; average work-experience 4.8 years) who completed a questionnaire on family-work conflict ( $\alpha = .91$ ) and reported on their organizational citizenship behaviors ( $\alpha = .85$ ).

### Results

The relationship between the variables of interest was  $r = -.26$  (95% CI  $-.19$  to  $-.33$ ), indicating that individuals who perceive that their family responsibilities interfere with their work roles also report less organizational citizenship behaviors. The strength of the relationship was similar for organizational and interpersonal citizenship.

### Limitations

Even though we collected information on causality of the relationship by asking participants about their reasons for reducing citizenship behaviors, future research will need to explore the nature of the relationship using longitudinal rather than concurrent designs.

### Research/Practical Implications

The notable correlation between family-work conflict and citizenship behaviors established in this study demonstrates the importance of exploring the mechanism underlying their relationship.

### Originality/Value

The negative effects of family-work conflict have so far received little research attention. To our knowledge, this study is the first to demonstrate the relationship between family-work conflict and organizational citizenship behavior at work.

### **The effects of perceived partner implication with household chores, on work-family conflict and psychosocial risk factors at work**

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### Purpose

The aim of the present study is to investigate the effect of the subject implication on household chores (and the perceived partner implication with it) chores, on work-family conflict as a relevant factor of psychosocial risks at work and to test whether the variable gender mediates this effect.

### Design/Methodology

The data were collected by a questionnaire which includes: Kopelman's, Greenhaus and Connolly Scales of Work-Family Conflict, Work Conflict and Family Conflict (1983), a Household Implication Scale (advised for this study), and various other questions about family profile. A sample of 819 workers was recruited, 63% of which were women and 36% were men with a mean age of 40.

### Results

Regarding the main aim of this study, ANOVA analyses show that: the higher the subject chores implication the lower the work-family conflict ( $F=3.393$ ;  $p \leq .067$ ), the lower the work conflict ( $F=6.449$ ;  $p \leq .012$ ), but the higher the family conflict ( $F=10.539$ ;  $p \leq .001$ ); the higher the perception of partner's implication on

household chores the higher the work-family conflict ( $F=19.898$ ;  $p \leq .000$ ), the higher the work conflict ( $F=5.519$ ;  $p \leq .020$ ) but no significant differences on family conflict; ANOVA analyses also show that the variable gender mediates the effect of subject implication with household chores, on work-family conflict. Explanations had to be based on *crossover theory* and *exhaustion theory*.

#### Limitations

The cross-sectional methodology.

#### Research/Practical Implications

The results could be applied to regulate organizational practices and social policies in an efficient way to promote work-family interface and to prevent psychosocial risk factors at work.

#### Originality/Value

Develop of work-family synergy and gender equality.

### **The mediating role of work-family conflict between work shifts, work on-call and nurses' exhaustion**

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#### Purpose

Work-family conflict (WFC) is a relevant topic in healthcare context (Simon, 2004). Work overload and schedule organization affect WFC, and studies indicate work shifts as one of its main determinants (Pisarski et al., 2008). Moreover, WFC represents a risk for workers' health.

This study aims to detect: the role of some *job demands* (work overload, emotional dissonance) and of *schedule organization* (work shifts, work on-call) in determining WFC; the role of WFC in determining exhaustion.

#### Design/Methodology

Respondents to the self-report questionnaire were 200 nurses working in an Italian hospital. The measures are: WFC ( $\alpha .88$ ), Exhaustion ( $\alpha .74$ ), Work overload ( $\alpha .92$ ), Emotional dissonance ( $\alpha .89$ ), Work shifts (1=yes), Work on-call (1=yes).

#### Results

The path analysis (Lisrel8.72) highlights: the relation of job demands and schedule organization with the WFC; the relation of WFC with exhaustion. There is a positive relation between work shifts and WFC [ $\chi^2(10)=17$ ,  $p < .01$ ; CFI=.97; NNFI=.95; RMSEA=.06; SRMR=.05].

#### Limitations

The use of a self-report questionnaire and a cross-sectional research design. Moreover, data were collected in a single context.

#### Research/Practical Implications

The central role of work shifts in determining WFC suggests the need to: act on schedule organization; promote training programs for supervisors and operators, to prevent risks associated with work shifts and work overload in terms of consequences on work-family balance. Moreover, promoting a family-friendly culture contributes to decrease the risk of exhaustion.

#### Originality/Value

This study contributes to deepen the role of job demands and schedule organization on WFC and the discomfort's dynamics in a professional category at risk in terms of health.

### **The professional working mother: Individual and organizational experiences of the early years of motherhood – Changing identities and employment relations?**

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**Purpose**

Gender and employment research identifies 'motherhood' as a core variable associated with inequality for women in relation to pay and employment prospects. 'Career women' experiencing the early years of motherhood may opt out of employment, or move to part-time employment, which frequently involves 'downgrading' in terms of skill and responsibility. The attrition of professional and managerial women from the workforce has been identified as a significant growing problem for business. The aim of the study is to explore how the dual identities of 'worker' and 'mother' are experienced and negotiated between the individual and the organization, during the early years of motherhood.

**Design/Methodology**

Employing a qualitative, longitudinal design using a single organization, up to ten mid-senior career female employees with children under 6 years will be repeat interviewed and asked to keep diaries over fifteen months. Organizational data will include in-depth interviews with managers, staff focus groups and review of organizational and HR policy documentation. The data will be explored using Interpretative Phenomenological Analysis.

**Research/Practical Implications**

Improved retention of target group

**Originality/Value**

This paper precedes empirical investigation, instead presenting a critical review of the limits of current conceptual and theoretical thinking in the fields of identity, and gender and employee relations with respect to the target group. In particular an argument is made for undertaking research that *simultaneously considers organizational and individual level data* in order to illuminate the *relational and active role* that organizations have in influencing the career decisions and identity

transformation of professional women experiencing the early years of motherhood.

**The impact of work-family conflict on employees well-being and families**

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Empirical studies have shown that job demands often cause conflicts with family and private life. This conflict could be time-based, strain-based or behaviour-based (Greenhaus & Beutell, 1985). Beyond spillover effects on the employees private life and their physical and psychological well-being (e.g. Eby et al., 2005), this conflict also can lead to crossover effects on the employees' spouses (e.g. Bakker et al., 2008).

The aim of this study was to investigate the effects of the work-family conflict on the employees themselves as well as on their spouses. Therefore, we conducted a study with matched couples – employees and their spouses (N=103). Both filled out a questionnaire. The employees were asked about their working conditions, their work-family conflict and their well-being, the spouses were asked to assess their own as well as the employees work-family conflict and well-being.

The results show an impact of the employees work-family conflict on their own well-being. Moreover, statistical analyses indicate a negative effect on the employees family life and on their spouses. Social support provided by the families has been identified as buffering those effects of the employees work-family conflict.

Strengths and limitations as well as practical implications of the study will be discussed.

### **Beyond management potential: How working time reductions affect managers' long-term career success**

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#### **Purpose**

Companies offer job-sharing, part-time work or other forms of voluntary reduced working time as parts of their work-life programs to increase the firm's attractiveness to job seekers. However, working time reductions might be detrimental to employees' career advancement. Our aim was to evaluate the effects of working time reductions on career advancement among employees who intended to take over leadership positions. We assessed how such reductions affect employees' career advancement beyond their management potential as judged in an assessment center (AC).

#### **Design/Methodology**

We related AC performance and indicators of working time reduction from 684 bank employees to career advancement 5 years after an AC used to select candidates for a management development program.

#### **Results**

Indicators of working time reduction showed negative relationships with career success (pay grade, salary increase, hierarchical advancement) even after controlling for gender, age, and management potential. Interestingly, employees with better AC performance reduced their working time to a stronger degree.

#### **Limitations**

The small number of men who reduced their working time prohibited meaningful analyses concerning differential effects for men and women.

#### **Research/Practical Implications**

As all participants were motivated to take over leadership positions and as working time reductions were not related to lower AC performance, our results suggest that negative effects of working time reductions on career advancement cannot be considered as a consequence of lower career ambitions or missing management potential.

#### **Originality/Value**

We provide longitudinal evidence for risks of part-time work in employees with strong management potential and ambitions.

### **Family supportive supervisory behavior: Does it lead to high-engaging work environments and work-family positive spillover?**

Caroline Straub (Grenoble Ecole de Management) [Caroline.Straub@grenoble-em.com](mailto:Caroline.Straub@grenoble-em.com), Barbara Beham (Humboldt Univ. zu Berlin), Corinna Behr (Humboldt Univ. zu Berlin)

#### **Purpose**

Family supportive supervisor behavior (FSSB) is a recently developed concept within work-family/life research that is considered to be an important prerequisite for effective work-life integration. Previous studies have shown that FSSB is related to employee outcomes such as lower levels of work-family conflict and stress, and higher levels of job satisfaction. Studies that investigate on the role of FSSB in creating high-engaging work environments that might lead to employee positive spillover are scarce. This study looks at the interplay between FSSB, employee work engagement and work-family positive spillover. Particularly, it hypothesizes that FSSB creates highly engaged employees, which in turn transfer their experiences such as values, skills and behavior at work towards their families.



**Design/Methodology**

Data originates from an online survey among employees in the IT branch of a multinational German company in the energy sector ( $N=424$ ).

**Results**

Findings support that FSSB is positively related to work engagement ( $\beta = 0.42^{**}$ ) moderated by gender ( $\beta = -0.13^*$ ) but not by parental status. FSSB is further positively related to instrumental work-to-family spillover ( $\beta = 0.15^{**}$ ), and this relationship is fully mediated by work engagement ( $\beta = 0.15^{**}$  vs.  $\beta = 0.05$ ). No support has been found for a direct relationship between FSSB and affective work-to-family spillover.

**Limitations**

Data was collected in one organizational context.

**Research/Practical Implications**

Findings expand existing research on FSSB by demonstrating its important role in creating high-engaged workers. These highly-engaged workers benefit from FSSB not only at work, but also transfer learned skills at work into their families.

**Originality/Value**

FSSB, high-engaging work environments, work-family positive spillover

**Flexible working arrangements: Intervening effects of employees' sense of entitlement and supervisors' family supportiveness and policy use**

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**Purpose**

Organizations have increasingly implemented flexible working arrangements (FWAs) to enhance employees' abilities to successfully ma-

nage their work and family responsibilities. However, empirical studies show a gap between organizational provision of FWAs and actual take up by employees. A family-supportive organizational culture and a supportive supervisor were found to stimulate FWA take up. In addition, qualitative research suggests that employees' sense of entitlement (SOE) for FWAs plays an important role in employees' decisions to use FWAs. This study examines the role of employees' perceptions of organizational supervisor support (FSOP), a family-supportive supervisor (FSSB) and supervisors own use of FWAs in creating SOE, which in turn is expected to increase FWA take up among employees.

**Design/Methodology**

Hierarchical linear modeling was used to analyze a matched sample of 285 employees and 58 managers of a German IT company.

**Results**

Two mediation effects were found: 1) FSSB fully mediates the relationship between FSOP and sense of entitlement. 2) SOE mediates the relationship between FSOP and FWA use of employees. Further, the positive relationship between FSSB and SOE was found to be moderated by supervisors' own use of FWAs ( $\beta = -.23, p < .01$ ).

**Limitations**

A self-developed measure of SOE was used, since no validated measure existed.

**Research/Practical Implications**

Findings expand existing research on the use of FWAs by demonstrating the importance of a family-supportive supervisor in creating a sense of entitlement which in turn increases actual take up among employees

**Originality/Value**

The paper is based on a matched sample of supervisors and employees and involves the rather new constructs of FSSB and SOE.

### **Offshore work and work-family balance. How do the employees and their partners approach the challenges?**

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#### **Purpose**

In the norwegian petroleum industry, offshore work usually includes being away from the family for a period of two weeks. The aim of this study was to explore how offshore workers and their spouses deal with challenges that they attribute to the offshore work.

#### **Design/Methodology**

Qualitative interviews with 14 offshore workers and their spouses were conducted. It was an inclusion criterion to have responsibility for at least one child under 18 years old. The interviews were first conducted in couples and then individually on topics regarding work-family balance. Using the Grounded Theory approach, the data was systematically structured and categorized in the software-program NVIVO.

#### **Results**

One core category, *mental approach* with two subcategories *Subjective coping capability* and *overall assessment* refers appeared in the material. Subjective coping capability refers to the experienced ability to handle the challenges, and overall assessment to whether the couple experienced a total gain or loss due to the work arrangement. Within the dimensions variations between informants and within the couple existed in both positive and negative directions.

#### **Limitations**

An increased number of informants could have revealed more nuances in the subcategories.

#### **Research/Practical Implications**

Individual differences in coping with work-family challenges should be explored further. This could be useful also for the offshore industry, regarding recruitment and personnel coursing.

#### **Originality/Value**

This study suggests that the dimensions of mental approach are important when coping with work-family challenges in an offshore work context. The dimensions seem to vary individually and be crucial for creating a foundation for constructive coping.

### **The satisfaction of users of work-life practices: More progress at home but less progress at work?**

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#### **Purpose**

Over the past decades, there has been a feminization of the workforce and an increase in dualcareer and single-parent households (Giardini&Kabst, 2008). The increasing number of employees who have to combine work with private-life responsibilities has stimulated a rise in work-life practices, like part-time and telework. As these practices make time more available and/or flexible, they are expected to enhance employees' satisfaction. However, studies on this relationship have produced inconsistent results (Ryan&Kossek, 2008). Therefore, more insights into the mechanisms by which the practices work, are needed (Beauregard&Henry, 2009). Most studies argue that the effects occur through less work-life conflict but only few studies have modeled this. Even less is known about negative side

effects of work-life practices (Ollier-Malaterre, 2010). This study tests the mediating effects of work-life conflict and career opportunities. The inclusion of the latter is inspired by career path dependency theory (Bernhardt et al., 2001), which suggests that people's career choices can limit or enable people's career opportunities. We expect a limiting effect since a reduction in visibility generally reduces one's promotability (Minnotte et al., 2009).

#### Design/Methodology

We will test our assumptions through structural equation modeling using two-wave longitudinal data of 2011 on 996 Belgian employees.

#### Results

Preliminary analyses supported our hypotheses.

#### Limitations

We cannot control for other career variables (e.g. employees' career orientations).

#### Practical Implications

This research can enable policy makers to stimulate work-life practices more efficiently.

#### Originality/Value

By studying work-life practices with career variables, we bridge the gap between the work-life and the career literature.

### **When will you be back? Predicting mothers' return to work decisions by internal and external factors**

#### ***Nominated for the EAWOP Congress 2013 Best Poster Award***

Thorana Grether (RWTH Aachen Univ., DE) [Grether@psych.rwth-aachen.de](mailto:Grether@psych.rwth-aachen.de), Anne Tzschach (RWTH Aachen Univ., DE), Bettina S. Wiese (RWTH Aachen Univ., DE)

#### Purpose

A mother's length of maternity leave as well as her working hours upon return have a crucial impact on her career outcomes. Integrating the theory of planned behavior and the Job Demands-Resources model, we expect mothers' return to work to be influenced by internal and external factors. We hypothesize that high levels of supervisor support and low work overload will foster mothers' return to work. In addition, we assume a faster return and longer hours among women who regard themselves to be efficacious with respect to managing work and family demands, have less traditional attitudes towards employed mothers, and who have high career aspirations.

#### Design/Methodology

Analyses are based on 140 women from Switzerland who are taking part in an ongoing longitudinal project on expectant parents' family and career plans. Measurement points took place during pregnancy, 6 and 12 months after childbirth.

#### Results

On average, women returned to work 5.37 months after childbirth ( $SD = 1.83$ ) and worked 23.03 hours per week ( $SD = 10.07$ ). Analyses revealed internal factors (i.e., career aspirations, mother-child ideology as subjective norm) to be more important for mothers' planned and actual timing of return and working hours than external factors.

#### Limitations

Our analyses were based on mothers who returned to work rather quickly (within one year after childbirth).

#### Research/Practical Implications

Career counseling should pay more attention to stereotypical attitudes that might affect mothers' career plans.

#### Originality/Value

This study applies a theoretical model integrating the theory of planned behavior and the Job Demands-Resources model to predict mothers' return to work decisions.

**Proactive or reactive approach to recreation planning in work: attitudes of employees to rest in organizations with traditional and flexible work/rest modes**

*Alla Kuznetsova (Lomonosov Moscow state Univ., RU) [kuznetsovamsu@rambler.ru](mailto:kuznetsovamsu@rambler.ru), Marina Luzianina (Lomonosov Moscow state Univ., RU), Natalia Filina (Lomonosov Moscow state Univ., RU)*

**Purpose**

The present study is focused on the problem of work/rest balance. Flexible work planning paradoxically promotes recreation decrease (Luzianina, 2005; Kuznetsova & Luzianina, 2005; Zijlstra & Rook, 2008; Schaufeli & Shimazu, 2009). The aim of the study: to reveal differences in proactive/reactive attitudes in recreation planning under various work/rest modes.

**Design/Methodology**

Employees in Russian, Uzbek and Ukraine organizations were involved in the study (N = 476). The set of assessment methods was designed to get data about: 1) recreation planning (Luzianina, 2003); 2) recreation efficiency (Leonova, 2003); 3) subjective diversity of work/rest (Artemyeva, 1999; Fantalova, 2001).

**Results**

The results showed: 1) demonstrated by the majority of respondents reactive approach leads up to non-efficient recreation; 2) organizational specificity has been found: in organizations with flexible work/rest modes the degree of rest availability differs due to the level of workload and subjective interpretation of work tasks priority; 3) even respondents with proactive approach tend to complain about lack of time for proper recreation; 4)

high similarity was found in recreation planning in employees living in different megalopolis.

**Limitations**

The data could be more precisely interpreted taking into account not only organizational specificity, but also cultural traditions of work-life balance structuring.

**Research/Practical Implications**

Under flexible work/rest modes the proactive attitude to recreation planning is tightly linked with the high work ability maintaining.

**Originality/Value**

Investigations of proactive/reactive approach to recreation planning as the new perspective research direction could help to predict the outcomes of sufficient recreation to career development and healthy life-style support.

## 5. Personnel selection and recruitment

### Invited Symposia

#### New Insights in Personnel Selection

Chair: *Marise Ph. Born (Erasmus Univ. Rotterdam, NL)* [born@fsw.eur.nl](mailto:born@fsw.eur.nl)

Facilitator: *Marise Ph. Born (Erasmus Univ. Rotterdam, NL)* [born@fsw.eu.nl](mailto:born@fsw.eu.nl)

##### State of the Art

Personnel selection is one of the oldest applied fields within psychology. This symposium gives new answers to very old questions, shows why some conventions in personnel selection should not be taken for granted, and opens up several new horizons.

##### New Perspective/Contribution

Within Europe, personality testing and the assessment center have been around for a long time. Yet, these methods both are troubled by old issues. Personality questionnaires can be faked. This issue is tackled in a new way. The first presentation tries to predict the occurrence of the so-called ideal employee factor within self-reported personality as a favorable way of self-presentation. In assessment centers, assessors should rate applicants on dimensions. However, the underlying AC-structure mostly is formed by exercise not dimension factors. The second contribution presents a new model which maintains the original idea of dimension-driven assessment centers. The third presentation moves beyond the habitual predictivist approach of selecting the most productive workers. Seeing selection as a social process in which workers try to decide whether the organization is right for

them, it shows the benefit of personality-based fit versus values-based fit during selection. The fourth and final presentation shows the detrimental effects of the increasing tendency to use short or abbreviated tests in selection decisions, with individual-level decision quality suffering from cheap and fast testing.

##### Conclusion and Implications for Research/Practice

Regarding construct- and criterion validation, the implications of faking, the use of dimensional assessment centers and of measuring personality-based fit are shown. Regarding selection decisions, the effects of using short scales is warned against.

#### ***Presentations of the Symposium***

##### **Can I fake me a job? Influences of the IEF**

*Vanessa Jacksch (Justus-Liebig-Univ. Giessen, DE)*  
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*Filip Lievens (Ghent Univ., BE)*

##### Purpose

During personnel selection, personality tests lose construct-related validity, as a common 'ideal-employee factor' (IEF) spans across different personality dimensions. Yet, research cannot agree upon the content of this factor, with different studies finding different personality dimensions loading onto the IEF. Assuming that the IEF results from candidates' favorable self-presentations, this study investigates the IEF's situational (differing job profiles) and individual (motivation and ability to fake) antecedents.

##### Design/Methodology

Students (N=320) filled out a personality measure once under non-evaluative conditions, and weeks later when 'applying' for the job of "counseling assistant" or "journalist assistant", developed with O\*Net's job descriptions. Then, participants indicated their

motivation to fake, ability to identify criteria (ATIC) and perceived test difficulty.

#### Results

CFAs showed that under applicant conditions, a six-factor model fit the data better than the usual five-factor model, even though the highest loadings onto the IEF differed: In line with O\*Net descriptions, a counseling job elicited loadings of agreeableness ( $\beta=.78$ ), emotional stability ( $\beta=.74$ ) and conscientiousness ( $\beta=.54$ ) and a journalistic job loadings of openness ( $\beta=.80$ ), emotional stability ( $\beta=.79$ ) and conscientiousness ( $\beta=.76$ ). Motivation to fake ( $\beta=.65$ ), ATIC ( $\beta=.65$ ) and perceived test difficulty ( $\beta=-.32$ ) significantly predicted the IEF.

#### Limitations

Subsequent tests should focus on true applicants and include more predictors (McFarland & Ryan, 2006).

#### Research/Practical Implications

Situational demands and individual differences predict the IEF, reopening the debate whether 'faking' represents a skill or a threat to the validity of personality testing.

#### Originality/Value

This is the first study addressing factors influencing the emergence and structure of the IEF.

### **"And yet it moves": New insights in the old question of whether assessment centers can measure dimensions**

Klaus G. Melchers (Univ. Ulm, DE)  
[k.melchers@psychologie.uzh.ch](mailto:k.melchers@psychologie.uzh.ch)

#### State of the Art

During the last decades, countless studies have cast doubts concerning the construct-related validity of dimension ratings from assessment centers (ACs). Specifically, these studies found that AC ratings reflect the different exercises much more than the targeted

dimensions and that it is hardly possible to improve their construct-related validity. As a consequence, some researchers have even suggested abandoning dimension measurement from ACs and stopping efforts to improve AC construct-related validity.

#### New Perspective/Contribution

This presentation first wants to show why measures to improve AC construct-related validity might be valuable even though their effects seem small at first sight. Then, a new structural model of AC ratings is presented that takes the similarity of the targeted dimensions into account by modeling broader dimensions that group together conceptually related dimensions. First evaluations of this model have supported the existence of such broad dimension factors and suggest that they contribute to the ACs' criterion-related validity beyond exercise factors and a general performance factor.

#### Research/Practical Implications

First, the research reviewed suggests that measures to improve construct-related validity might pay off for operational ACs. Second, the new structural model presented shows how dimensions can be modeled in ACs. Third, in contrast to previous research, it also supports the use of dimension information for selection and development purposes.

#### Originality/Value

In contrast to the predominant negative view on AC construct-related validity this presentation shows that dimension information is important and should not be disregarded in ACs.

### **Personality-based Person-Organization Fit: A new perspective on personality in selection**

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### Purpose

The aim of the present study is to demonstrate the value of personality in selection from a new perspective, namely as an expression of Person-Organization (P-O) fit. Prior research has established that values-based P-O fit is a valid predictor of attitudinal and behavioral outcomes (e.g., satisfaction & intention to stay). Analogous to research in values-based fit, we hypothesized that personality-based fit predicts satisfaction and the intention to stay. Furthermore, we hypothesized that personality-based fit predicts satisfaction and the intention to stay over and above individual and organizational personality.

### Design/Methodology

433 employees across different Dutch organizations completed questionnaires on their individual personality and on the perceived personality of the organization. Personality dimensions included agreeableness, enterprise, competence, chic, ruthlessness, innovativeness, and stability. Additionally, satisfaction and intention to stay was measured.

### Results

Polynomial regression analysis and surface plots revealed that fit led to satisfaction only when the values of P and O on competence, chic, ruthlessness, and stability were high. Similarly, fit led to an intention to stay only when P and O were high on chic, ruthlessness, and innovativeness. The fit variables for most personality dimensions explained additional variance over individual and organizational personality in predicting satisfaction and intention to stay.

### Limitations

It remains to be tested how much the results generalize to selection practice as the sample included employees and not applicants.

### Research/Practical Implications

The study presents evidence for the value of personality-based P-O fit.

### Originality/Value

The results make a case for including personality-based fit in the selection process.

## **Test length and decision quality in personnel selection: When is short too short?**

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### Purpose

Personnel selection shows an enduring need for short stand-alone tests consisting of, say, 5 to 15 items. Despite their efficiency, short tests are more vulnerable to measurement error than longer test versions. Consequently, the question arises to what extent reducing test length deteriorates decision quality.

### Design/Methodology

We investigated the relationship between test length and decision quality using data simulated by means of item response theory. For five different personnel-selection scenarios, we studied the effects of reducing test length on decision quality for tests with different item characteristics. A distinction was made between decision quality at the group level and the individual level.

### Results

Results showed that test shortening had a large negative impact on individual-level decision quality, particularly for selecting candidates when base rates or selection ratios were low. Negative effects on decision quality were smaller at the group-level than at the individual-level. Results were similar for dichotomous-item tests and rating-scale tests, and also for top-down and cut-score selection.

### Limitations

This study focused on change in test reliability and decision quality as a consequence of test shortening. Practitioners should also consider test validity when planning to use a shortened test in personnel selection.

### Research/Practical Implications

Test users are advised to use tests of at least 20 items to obtain adequate decision quality at the group level and at least 40 items if adequate decision quality at the individual level is required.

### Originality/Value

Despite their popularity, using short tests may have a deteriorating impact on decision quality in personnel selection.

## Symposia

### The Impact of International Guidelines on National Practice

*Chairs: Harald Ackerschott (ackerschott and associates, DE) [ha@ackerschott.eu](mailto:ha@ackerschott.eu), Dragos Iliescu (Testcentral, RO) [dragos.iliescu@testcentral.ro](mailto:dragos.iliescu@testcentral.ro)*

*Facilitator: Dr. Dorothea Klinck (German Federal Employment Agency, DE) [Dorothea.Klinck@arbeitsagentur.de](mailto:Dorothea.Klinck@arbeitsagentur.de)*

#### State of the Art

The symposium focuses on international Guidelines, especially on the Guidelines issued by the ITC (International Test Commission) and, to a lower extent, the EFPA (European Federation of Psychologists' Associations), and discusses their adaptation to the specifics of different countries.

#### New Perspectives/Contributions

Adaptation to national contexts, further international development, or interchange between national and international contexts in guidelines development is discussed.

### Research/Practical Implications

The symposium has practical implications for good practice at a national and international level.

### ***Presentations of the Symposium***

#### **The impact of ITC guidelines and BPS standards on occupational testing in the UK**

*Dave Bartram (SHL Group, UK)*  
[Dave.Bartram@shl.com](mailto:Dave.Bartram@shl.com)

#### State of the art

Until the late 1980s, the BPS had a quality control system that accredited Training Courses in Testing. Then a new approach was developed: based on the concept of assessing the competence of test users. Detailed specifications of performance requirements were developed and the BPS began certifying test users in 1991. Since then, over 37,000 people have received certificates of competence in testing. The ITC test use guidelines were developed in the late 1990's and built on the work done in the UK. EFPA took the ITC guidelines as a systematic framework for their more detailed standards, which were approved in 2007. The BPS decided to revise and update all its qualifications in line with the EFPA standards and a new UK Test User qualification system was launched in September 2011, with over 10,000 registered test users. This new system, which follows the EFPA 3-level model, had its Level 1 and Level 2 occupational test user qualifications accredited by EFPA in February 2012. Now, nearly 1,000 people have obtained the Euro-Test Certificate. The qualifications in the UK have set a standard which is widely accepted. Furthermore, there is increasing demand for the BPS qualifications from other countries.

#### New Perspectives/Contributions

Consecutive developments of standards and guidelines which build on each other and on

national and international pressures is discussed.

#### Practical Implications

The presentation has implications for the further development and national adaptation of international standards and guidelines.

### **The impact of guidelines and professional standards on occupational testing in Germany**

*Harald Ackerschott (ackerschott and associates, DE) [ha@ackerschott.eu](mailto:ha@ackerschott.eu)*

#### State of the art

The current situation of test and assessment practices in Germany will be described. The Positions of the relevant professional and academic associations will be reflected concerning the impact of guidelines and professional standards.

#### New perspectives/Contributions

The different relevant standards and sets of guidelines will be compared and contextualized:

- ITC guidelines on test use, on computer-Based and internet-delivered Testing, on Quality Control in Scoring, Test Analysis and Reporting of Test Scores
- recommendations on test reviews of the "Testkuratorium" of the German Federation of Psychological Associations,
- DIN 33430 on "Eignungsdiagnostik"
- ISO 10667 on assessment delivery
- German Standards for Assessment Center Operations by the „Arbeitskreis Assessment Centers e.V.

#### Practical implications

The perspectives of the development in testing in Germany will be presented.

### **Adaptation of the ITC guidelines on computer-based and internet-delivered testing in NL**

*Iris Egberink (Dutch Committee on Tests and Testing (COTAN), NL) [i.j.l.egberink@rug.nl](mailto:i.j.l.egberink@rug.nl)*

#### State of the Art

Several developments are of interest in the Netherlands regarding the use and/or integration of the ITC Guidelines on Computer-Based and Internet-delivered Testing into the current rating system. The ITC Guidelines on Computer-Based and Internet-delivered Testing are in the process of being translated and adapted to the Netherlands. However, they cannot be used as is, and need certain adaptations, in order to be compatible with guidelines which already exist, or with current and desired practice in the Netherlands

#### New Perspectives/Contributions

The presentation will discuss and explain which parts of the ITC Guidelines on Computer-Based and Internet-delivered Testing COTAN would like to use and which parts not, and outline and discuss the main reasons.

#### Practical Implications

Implications for the adaptation of these and other ITC Guidelines from an international to a national level are discussed.

### **Advantages and disadvantages for the existence of two test review systems in the same country**

*Anders Sjöberg (Stockholm Univ., SE) [anders.sjoberg@psychology.su.se](mailto:anders.sjoberg@psychology.su.se)*

#### State of the Art

The background and development of two test review systems, that are in use today in Sweden, are described: The National Board of Health and Welfare (NBHW) test review system and the European Federation of Psychologists' Associations (EFPA) test review system. Advantages and disadvantages are

discussed from the perspective that validity is (or is not) a characteristic of a test.

#### New Perspectives/Contributions

The development of convergent standards which are run in parallel is discussed. Different outlooks upon psychometric characteristics are outlined.

#### Practical Implications

Effects on practice generated by the existence of multiple review systems are discussed, as well as the import of an international review system which is to coexist with a nationally developed standard.

### **The ITC guidelines as references for best practices in the domain of tests and testing**

*Dragos Iliescu (Testcentral, RO) [dragos.iliescu@testcentral.ro](mailto:dragos.iliescu@testcentral.ro)*

#### State of the art

The ITC Guidelines are one of the primary and most celebrated products of the International Test Commission. The ITC Guidelines are targeted at members, but also at psychological associations and practitioners who are not ITC members. They are written for an international audience and with the specific intent to set clear references for best practices in the domain of tests and testing. This session aims to present the scope and usage, impact and possible evolutions of the already existing and of the upcoming ITC Guidelines. Six Guidelines, their scope and intention will be briefly presented: the ITC Guidelines on Test Use, the ITC Guidelines on Computer-Based and Internet-delivered Testing, the ITC Guidelines on Adapting Tests, the ITC Guidelines on Quality Control in Scoring, Test Analysis and Reporting of Test Scores, the ITC Guidelines for Quality Control, and the ITC Guidelines for Tests for Non-native speakers.

#### New perspectives/Contributions

Particularization of the ITC Guidelines for specific settings is possible, but has not been undertaken until now.

#### Practical implications

Implications for the practical usage of the ITC Guidelines in Work/Organizational settings are discussed.

## **ENESER Symposium: How Applicant and Recruiter Behaviors Affect Selection Interview Outcomes**

Chairs: *Klaus G. Melchers (Univ. Ulm) [klaus.melchers@uni-ulm.de](mailto:klaus.melchers@uni-ulm.de), Janneke K. Oostrom (VU Univ. Amsterdam) [j.k.oostrom@vu.nl](mailto:j.k.oostrom@vu.nl)*

#### State of the Art

The selection interview continues to be among the most frequently used selection procedures. Innumerable studies have shown that interviews can be valid predictors of performance (cf. Posthuma, Morgeson, & Campion, 2002), that they are well accepted by applicants as well as by recruiters (e.g., Lievens, Highhouse, & De Corte, 2005), and that they show less bias than other commonly used selection tools (e.g., Huffcutt, Conway, Roth, & Stone, 2001). Nevertheless, there are several important questions that are still unresolved pertaining to how specific behaviors and characteristics of applicants and recruiters affect selection interview outcomes. For example, what are the effects of specific recruiter behaviors on applicant reactions? Or how do minority status and physical applicant attributes influence interview outcomes?

#### New Perspective/Contribution

This symposium adds to a meager body of theoretical and practical knowledge on how specific behaviors and characteristics of applicants and recruiters affect selection interview outcomes (i.e., applicant and recruiter reactions, bias, and validity). The symposium

brings together researchers from the European Network of Selection Researchers (ENESER). They will present five empirical studies from three countries (Switzerland, Belgium, and the Netherlands).

#### Research/Practice Implications

The results from the different studies help to gain deeper insight why interviews are valid, and to better understand which factors might bias interview decisions or which help to achieve desired interview outcomes. Thereby, they inform applicants as well as recruiters on how to further improve the way in which interviews are used for selection and recruitment purposes.

### ***Presentations of the Symposium***

#### **Off the shelf or tailor-made: How perceived interviewer behavior affects recruiting outcomes**

Annika Wilhelmy (Univ. Zürich) [a.wilhelmy@psychologie.uzh.ch](mailto:a.wilhelmy@psychologie.uzh.ch), Martin Kleinmann (Univ. Zürich), Klaus G. Melchers (Univ. Ulm)

#### Purpose

Both treating applicants equally (standardization) and considering applicants' individual needs and backgrounds (consideration) have been found to positively influence applicants' reactions to interviews. However, there have been divergent views on whether these interviewer behaviors constitute independent or opposing factors. Therefore, a goal of this longitudinal field study was to investigate how perceived standardization and consideration are interrelated. Furthermore, we wanted to examine possible underlying mechanisms through which perceived standardization and consideration influence recruiting outcomes.

#### Design/Methodology

Data were collected from 116 candidates applying for a Bachelor's program. Questionnaires were filled out 1-2 weeks prior to the

interview, directly after the interview, and after applicants had received the interview results.

#### Results

Perceived standardization and consideration were not significantly related, indicating independency of the two constructs. In addition, the effects of perceived standardization and consideration on recruiting outcomes were mostly mediated by the proposed sets of mediators.

#### Limitations

Perceived interviewer behavior and mediator variables were measured at the same time, so that reversed causation may apply. However, in the field, perceptions of interviewer behavior can only be assessed after the interview.

#### Research/Practical Implications

Interviewers seem able to treat applicants in a standardized way while at the same time showing individualization. The combination these interviewer behaviors might be a key factor for increasing recruitment success.

#### Originality/Value

Our results shed light on the question whether interviewers should treat every applicant equally while at the same time incorporating warmth and consideration. Furthermore, our findings enhance theoretical understanding of the processes underlying applicants' reactions to interviews.

#### **Putting your best foot forward during the employment interview: Do ethnic minorities benefit too?**

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#### Purpose

Very few studies have investigated cultural differences in impression management (IM) use. As a first goal, we investigated whether

Arab/Moroccan minorities differed from ethnic majorities in their preference for IM-tactics. In the interview literature, little attention goes to recruiters' sensitivity to IM-tactics. Therefore, we further investigated whether recruiters' social dominance orientation (SDO), ethnic identification (EI), and interview experience (IE) moderated effects of 'culture-specific' IM-tactics on ethnic majorities' ratings of ethnic minorities' interview performances.

#### Design/Methodology

We first conducted a focus group (n=12) and survey (n=53) to investigate 'culture-specific' IM-tactics. Subsequently, we conducted a 3 (IM-tactic: Control/No IM-tactic vs. Entitlements vs. Opinion conformity) by 2 (Professional Experience: Low vs. High) between-subjects experiment (n=165 real native/Belgian recruiters).

#### Results

Ethnic minorities preferred 'entitlements' whereas majorities (Belgians) preferred 'opinion conformity' as IM-tactics. AN(C)OVAs showed that ethnic minorities were rated lower if they used entitlements particularly if majority recruiters were high in SDO, EI, and IE.

#### Limitations

Follow-up studies might benefit from larger samples and investigate real instead of mock interviews.

#### Research/Practical Implications

Some IM-tactics are more helpful to ethnic minorities than others but effects depend on recruiter characteristics. Findings provide some practical guidance on the training of recruiters. Insights might also help maximizing qualified minorities' job chances.

#### Originality/Value

While IM in the selection interview is well investigated, the fairness of the interview in relation to how ethnic minorities present

themselves and the role of the recruiter remain under-researched. This study is among the first to investigate culture-specific IM-tactics and their effects on interview outcomes.

### **Tattoo is taboo, only if you're not open to (experience)**

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#### Purpose

Thirty years of research has shown evidence for biased decision-making in the selection interview by applicant factors, like obesity. Researchers only recently turned their attention to facial stigma as sources of bias. As a first goal, we investigated whether more controlled facial stigma (like tattoos) were evaluated more negatively than less controlled stigma (like scars). Because little research has investigated contingencies of discriminatory interview decisions, as a second goal, we investigated moderating effects of interviewers' personality on biased decision-making.

#### Design/Methodology

We conducted a 3 (Visible stigma: Control vs. Tattoo vs. Scar) by 2 (Professional experience: Low vs. High) between-subjects experiment with 120 raters who screened and evaluated video-taped interviews of equally qualified applicants.

#### Results

ANCOVAs indicated no main effect of stigma but showed a moderating effect of openness to experience on hiring outcomes: Raters high in openness were less likely to discriminate against visually stigmatized candidates in the job interview.

#### Limitations

Further research might investigate hiring discrimination in real-live interviews.



### Research/Practical Implications

More research should focus on recruiters' characteristics for a better understanding of discriminatory decision-making against stigmatized individuals. Practice should be aware that discriminatory hiring decisions also depend on the recruiters' personality, which could potentially cause suboptimal hires and might trigger discrimination-lawsuits.

### Originality/Value

This study is among the first to investigate discrimination of visually stigmatized candidates in selection interviews. By showing the joint effects of applicant characteristics (visual stigma) and recruiters' personality (open-mindedness), we further insights into the complexity of hiring discrimination during the interview phase.

### Exploring two explanations for the validity of situational interviews: Saying how you would behave or knowing how you should behave

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### Purpose

One explanation underlying the validity of situational interviews is that they assess intentions concerning applicants' later behavior (e.g., Latham, 1989). Recently, Kleinmann et al. (2011) presented another explanation, that is that individuals differ in their ability to identify the criteria (ATIC) that are assessed. This ability helps people to read situational demands in both interviews and job contexts, meaning that it represents a common cause of performance in both contexts. The present study examined these two explanations.

### Design/Methodology

N=101 students participated in a 2-day selection simulation with a 2-week time interval between the 2 days. At T1, participants com-

pleted a situational interview and an ATIC measure and at T2 a job simulation and an ATIC measure.

### Results

Scores on the interview predicted scores on the simulation. Behaviors shown in the simulation overlapped considerably with responses during the interview. ATIC in the interview was related to performance on the interview and to performance on the simulation. Controlling for ATIC in the interview only slightly decreased the relationship between performance on the interview and on the simulation.

### Limitations

Future research, using actual applicants in a real selection situation, is needed to determine whether present findings generalize to the field.

### Research/Practical Implications

Results showed that both explanations hold up to a certain extent. It is important to understand the mechanisms underlying the validity of personnel selection procedures, as this might contribute to their advancements.

### Originality/Value

The present study extends current knowledge on the validity of situational interviews, by examining two proposed explanations.

### How often are trick questions asked in job interviews? Recruiters' and applicants' perceptions

Nicolas Roulin (Univ. of Lausanne) [nicolas.roulin@unil.ch](mailto:nicolas.roulin@unil.ch), Adrian Bangerter (Univ. of Neuchâtel)

### Purpose

The relation between applicants and recruiters in personnel selection is often described as being competitive or conflict-oriented (Bangerter et al., 2012). Applicants are often depicted as preparing themselves to influence

recruiters and to get hired, and recruiters as trying to find solutions to control applicants' influence. Asking trick questions to applicants is a solution often mentioned in the popular literature, but to date no study has examined this issue. Based on pluralistic ignorance (Prentice & Miller, 1993), a theory explaining how individuals can hold an opinion while mistakenly believing that their peers hold a different one, we examined applicants' and recruiters' actual experience with trick interview questions and their perceived diffusion of such questions in interview practice.

#### Design/Methodology

Eighty-two recruiters and 230 applicants from Switzerland completed a questionnaire about their experience with and perceived diffusion of trick interview questions.

#### Results

Results showed that both applicants and recruiters overestimated the diffusion of such questions in job interviews as compared to their own experience, thus being prone to pluralistic ignorance. Moreover, applicants who participated in more interviews were less prone to pluralistic ignorance, but recruiters who conducted more interviews were not.

#### Limitations

We have a small sample size for recruiters, mainly young and inexperienced applicants, and results may differ in countries with different legislations.

#### Research/Practical Implications

Our results highlight the importance of informing both applicants and recruiters about the true norm regarding the diffusion of trick questions.

#### Originality/Value

We highlight a pluralistic ignorance bias regarding the questions asked during job interviews.

## Cognitive and Implicit Factors in Medical Selection: Best Practice and Future Directions

Chairs(s): *Roderick Ian Nicolson (University of Sheffield) [r.nicolson@sheffield.ac.uk](mailto:r.nicolson@sheffield.ac.uk)*

Facilitator: *Fiona Patterson (Work Psychology Group) [f.patterson@workpsychologygroup.com](mailto:f.patterson@workpsychologygroup.com)*

#### Overall Symposium Format

Selection of executives and other professionals represents a 'high stakes' situation, with an uncertain win/lose outcome for each candidate. Development of objective, effective and transparent procedures has been a major issue for HR and work psychology. This symposium presents findings from several relevant disciplines.

#### State of the Art

Best practice in executive selection involves an iterative, sequential process in which appropriate target behaviours are identified; constructs derived; scales developed; validated; refined; and subjected to predictive analysis. Selection of medical professionals is staggeringly costly with major implications for subsequent healthcare. Extensive research and practice has provided a solid platform for further progress. Behavioural constructs and knowledge domains have been identified and validated. Clinical Knowledge tests and Situational Judgment Tests provide low cost, valid tests for declarative and procedural knowledge whereas Assessment Centres provide additional validity for interpersonal skills. Overall predictive performance for combined tests is good but not outstanding.

#### New Perspectives/Contributions

1. SJTs provide a valid, reliable methodology for testing non-academic attributes in medical selection
2. Cognitive abilities may be targetted within an 'implicit trait policy' analysis

3. interactive, video-based 'expert systems' capture and report inter-personal skill constructs accurately and objectively

In addition, we advocate a broader approach in which selection leads into more effective 'onboarding' for those selected, and adaptive support for those not selected

#### Research/Practical Implications

The research has significant implications for executive selection in many occupations. It challenges HR selection professionals to broaden their scope to include onboarding and coaching.

### ***Presentations of the Symposium***

#### **Using situational judgement tests (SJTs) for selection of doctors: validation evidence from seven independent studies**

Maire Kerrin (Work Psychology Group) [m.kerrin@workpsychologygroup.com](mailto:m.kerrin@workpsychologygroup.com), Analise La-Band (Work Psychology Group), Vicki Ashworth (Work Psychology Group), Fiona Patterson (Work Psychology Group and University of Cambridge)

#### Background and purpose

Situational Judgement Tests (SJTs) are an increasingly popular selection method for evaluating non academic skills across many high stakes settings. This paper examines the validity of SJTs for use in UK postgraduate medical selection. The results are used to inform future policy development for using SJTs in selection for all medical specialties.

#### Design/Methodology

Seven independent studies focusing on the design and validation of specialty-specific SJTs for non academic skills (eg. integrity, empathy, teamworking) were conducted. Specialties included:

- (1) General Practice (N=6,824)
- (2) Surgery (N=285)

- (3) Acute Specialties (N=351)

- (4) Radiology (N=297)

- (5) Obstetrics/Gynaecology (N=265)

- (6) Public Health (N=297)

- (7) Histopathology (N=95).

#### Results

Results from each study consistently show each SJT to have good reliability and validity (face, content, criterion-related), although there is important variation between specialties. There are significant differences in priorities for non-academic skills for each specialty (eg. surgery vs general practice), which is reflected in the test specification for each specialty.

#### Conclusions/Practical Implications

SJTs are a reliable and valid selection methodology for testing important non academic attributes for postgraduate medical training. A broadranging SJT could be designed for selection for all specialties but the weighting of various attributes should be tailored to the priorities of each specialty.

### **Cognitive Factors in Situational Judgment Tasks**

Sally Mumford (University of Sheffield) [ecq10srm@sheffield.ac.uk](mailto:ecq10srm@sheffield.ac.uk), Roderick Ian Nicolson (University of Sheffield)

#### State of the Art

The SJT is now well established for high stakes testing, and it is therefore timely to consider how its scope may be increased and limitations reduced.

#### New Perspective/Contribution

Motowidlo and Beier (2010) argue that SJT performance may be dissociated into two dimensions: specific job knowledge and 'Implicit Trait Policies', where an ITP reflects application of common sense. Unfortunately,

they analysed ITPs only for the personality dimensions of agreeableness and conscientiousness. Cognitive theory from various sources – Piaget, Anderson and Senge – indicates that three cognitive 'traits' should also be assessed: ability to derive general 'system level' principles from concrete examples; ability to use general procedures to derive an appropriate procedure for a novel situation; and the ability to learn effectively from experience. In addition, generic skills of reasoning under uncertainty together with understanding of diagnostic risk management seem important.

#### Research/Practical Implications

Results from two studies assessing these cognitive skills and attributes will be presented. In Study 1 medical experts rate the importance of these cognitive skills, relative to the criterion skills already established by Patterson and colleagues. In study 2 the cognitive measures will be added to the existing assessment programme for applicants to a University medical degree course. Unique and shared variance with the existing battery will be evaluated.

#### Originality/Value

Cognitive psychology ideas and theory may help us to understand, explain and improve medical selection techniques. The studies to be reported are the first to investigate these issues.

### Personal qualities and characters in medical selection

*Philip Chan (University of Sheffield) [p.chan@sheffield.ac.uk](mailto:p.chan@sheffield.ac.uk), Nigel Bax (University of Sheffield)*

#### State of the Art

Selection for undergraduate medical school entry in the UK is based on academic thresholds, cognitive testing and on a judgement of personal qualities and achievements from written statements and interviews.

#### New Perspective/Contribution

Nearly all UK medical schools use similar academic criteria based on grades achieved in GCSE and A level examinations and cognitive test scores (UKCAT and BMAT). This has narrowed the pool for selection, increasing competition for a subset, while disappointing many well-qualified applicants.

The dominance of criterion-based scoring systems for selection risks narrowing the characteristics of entrants into the profession. The only source of diversity is in judgement of personal qualities.

Selection based on assessment of personal qualities has been previously disfavoured as unreliable. We have drawn upon the literature of the positive psychology movement (Peterson & Seligman) to use the characters that lead to success and happiness as a person to define the qualities of a successful medical student. Extensive literature has shown these qualities to be internally consistent, as well as culturally neutral.

Assessment and judicious use of these qualities can promote diversity in the selection process rather than a convergence on uniformity.

#### Research/Practical Implications

Interviewers are asked to assess characters of medical school applicants at interview. Applicants are asked separately to self assess using the same methodology. Potential effects on selection are explored.

#### Originality/Value

Promotion of diversity in selection may appear anti-scientific, but there is a clear need and rationale to move in this direction.

## Medical Selection: A Systems Level Approach

Roderick Ian Nicolson (University of Sheffield)  
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### State of the Art

High stakes selection is costly, uncertain and disappointing for many. The domain of medical selection provides a wealth of high quality research and data on optimizing the process. There is now a solid basis to support significant progress.

### New Perspective/Contribution

Related disciplines provide converging good practice. Criterion-referenced testing requires that criteria for adequate performance be developed on the multiple dimensions involved. Predictive models require that discriminant function analysis (or equivalent) be used on the multiple scores to partition the applicants. Systems level theorists require that the entire system – from training to selection to subsequent performance – be considered as a whole, and that tests and learning experiences are designed to optimize overall performance for all stakeholders.

Recent technological advantages, such as use of video for presentation, and of webcams for responses have great promise for assessing skills that SJTs cannot reach. The Video-Supported Active Learning (ViSuAL) methods for integrating video presentations within an interactive format allows on-the-fly scheduling, interleaving of a range of SJT or clinical problems. A ViSuAL demonstration will be given of diagnostic test administration and automatic compilation of a criterion-referenced report.

### Research/Practical Implications

The ViSuAL framework combines the face-validity of video for inter-personal skills with the opportunity to collect SJT and problem-based data within an integrated environment. Greater synergy will be created if selection

data are used to inform subsequent learning and 'onboarding' for those selected.

### Originality/Value

Exploitation of new technology to enhance established HR selection techniques has applicability throughout HR selection.

## One Score or More? Reflections on the Controversy over a General Factor of Personality

Chair: Iain Robert MacIver (Saville Consulting)  
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### State of the Art

The symposium pulls together some differing perspectives on the General Factor of Personality (GFP).

### New Perspective/Contribution

In the first paper, the methodological problems of extracting the first factor are discussed. Alternate approaches of adding together Big Five personality or Great Eight competency construct scores to create an overall score are compared, and the convergence of this score across seven personality questionnaire is outlined.

The second paper focuses on the positive relationship between GFP and intelligence as reported by Irwing et al. (2012). Based on meta-analytic data this relationship is investigated by breaking personality variables into alpha and beta and intelligence into fluid and crystallised. The findings have important implications for the theoretical basis of the GFP.

The third paper considers the 16PF and the failure to find an overall factor. The paper questions whether broad personality factors explain as much as individual personality scales in relation to forecasting individuals' ratings of effectiveness and satisfaction.

The fourth paper focuses on different methods of creating an overall composite score

from both personality (predictor) and criterion data. The paper compares the validity of extracting the first unrotated component from principal component analysis with mapping the variables to create a Great One score. This approach is mirrored on the criterion and predictor side.

#### Conclusion and Implications for Research/Practice

The question this symposium seeks to address is what a GFP actually measures and forecasts, and the parallel conceptualisation of a General Factor of Effectiveness (GFE) arising out of positively correlated behavioural competency criteria.

### ***Presentations of the Symposium***

#### **Construct convergence of Big 5 personality and Great 8 competency variables**

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##### Purpose

The Great 8 competencies add Need for Achievement and Power constructs as well as Analysis to the Big 5. The convergence of these two construct sets is researched for Total and Domain scores.

##### Design/Methodology

Great 8 mappings of Saville et al (2008) were used to create construct scores across 7 substantial personality questionnaires (Including HPI, 16PF, OPQ32i, NEO and three versions of Wave), and correlated with NEO-PI-R Big 5 constructs on a mixed occupational group (N=308).

##### Results

The correspondence between NEO Big 5 and Great 8 competency construct counterparts was high ranging from .81 for Neuroticism with Adapting & Coping to .61 for Agreeableness with Supporting & Cooperating, and .61 for Extraversion with Interacting & Presenting and

Leading & Deciding combined. NEO Big5 Total correlated .61 with the Great 8 Total across seven PQ's.

##### Limitations

The research relies on the NEO-PI-R measurement of the Big 5 which while widely used is nevertheless only one of many Big 5 measures.

##### Research/Practical Implications

These findings show clearly that Big 5 constructs as measured through NEO-PI-R relate closely to Great 8 scores across 7 substantial personality questionnaires. The convergence between the higher-order Total constructs is fairly strong suggesting an underlying Effectiveness Potential constructs.

##### Originality/Value

The study provides evidence of alignment between the Big Five and Great Eight and for a higher-order Effectiveness construct. STORM software shows graphically the relative distances between the two sets of constructs.

#### **The relationship between General Mental Ability and the General Factor of Personality: Findings from meta-analytic data**

Matthias Ziegler (Humboldt Univ., Berlin)  
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##### Purpose

A recent study by Irwing et al. (2012) reported a weak correlation between general intelligence and the general factor of personality (GFP). The authors concluded that this correlation could be explained by Life History Theory (LHT). However, a harder test for the underlying LHT would be to differentiate between fluid and crystallized intelligence.

##### Design/Methods

The present study uses meta-analytical structural equation modeling based on correlation matrices derived from two large meta-



analyses to differentiate between g, gf, and gc and controlling for the specific variance of Stability and Plasticity as two established indicators of the GFP.

#### Results

Our findings largely replicate the overall correlation between g and GFP reported by Irwing et al. ( $r_{g,GFP} = .26$ ,  $p < .001$ ) but shed light on the question why these two abstract latent traits are positively related. Results show that the relationship between g and GFP is driven by the correlation between Plasticity and gc ( $r = .47$ ,  $p < .001$ ) and that the correlation between g and GFP disappears if only gf is considered.

#### Implications

These findings, which can theoretically be explained by the Openness-Fluid-Crystallized-Intelligence (OFCI) model, cast doubt on the LHT explanation for the correlation between the GFP and g. Moreover, the hypothesis of the GFP reflecting SDR found more support than the hypothesis of the GFP as a substantial personality trait.

#### Originality

This is the first study using meta-analytical data to look at the relationship between the GFP and fluid and crystallized intelligence. The findings have implications for the theoretical foundation of the GFP.

### Is the 'Big One' too big to be useful?

Rob Bailey (OPP Ltd) [Rob.Bailey@opp.com](mailto:Rob.Bailey@opp.com)

#### Purpose

This presentation covers attempts to replicate the Big One, aka General Factor of Personality (e.g. Musek 2007, van der Linden 2011), from the 16PF questionnaire.

#### Design/Methodology

1,212 UK & Irish working age participants completed the 16PF personality question-

naire, plus a survey job satisfaction and success at work.

#### Results

The study did not find a clear one-factor solution from Principle Components Factor Analysis; instead a two factor model was found. For the purpose of predicting job satisfaction and success, broad personality factors were found to have less validity than more granular ones.

#### Limitations

Criteria concerning job satisfaction and success at work were self-reported; third-party ratings (e.g. supervisor) of job performance could have been a more objective alternative.

#### Research/Practical Implications

This presentation explores the GFP and the utility of the concept. The paper contrasts the predictive validity of a two factor solution, a five factor solution and regression weights arising from 16 detailed factors.

This will build on Herrmann and Bailey's 2009 EAWOP paper which contrasted the utility of 5 Factors vs. 16; it was found that regression equations based on 16 Factors yielded higher validity for 360 degree feedback than the 5 Global Factors.

#### Originality/Value

Studies focusing on a small number of factors have dominated personality research; this is likely to be due to their universal nature, rather than their predictive power. It is less usual to see mapping of specific personality factors to discrete job criteria.

### The great one – Not the first one

Iain Robert MacIver (Saville Consulting) [rab.maciver@savilleconsulting.com](mailto:rab.maciver@savilleconsulting.com)

#### Purpose

The purpose of the paper is to compare different methods of creating overall criterion scores, overall personality scores and the cri-

terion-related validity of these different methods.

#### Design/Methodology

Wave Professional Styles, OPQ32i, NEO-PI-R, 16PF5 and the Hogan Personality Inventory were completed by 308 participants. A behavioural criterion measure based on 36 criteria was completed by raters.

The study compared different bases for creating overall scores. The first method deployed the first unrotated principle component (FUPC) on the questionnaires scales. The second method used the FUPC from a subset of scales aligned to the Great Eight competencies. The third method used the FUPC Great Eight prediction scores (MacIver et al, 2010). The last method was a unit weighted sum of the Great Eight scores. The four methods were also used with the 36 behavioural criteria. The results of the different methods of personality and criteria were correlated.

#### Results

The results indicate that the first unrotated components provide highly erratic (variable) validities. However, the unit weighted scores of the Great Eight provide more stable and appreciable validities across the different personality instruments.

#### Limitations

Further studies would provide more reassurance of the stability of these mapped unit weighted scores.

#### Research/Practical Implications

The results bring into question the utility of the first unrotated component and argues for the creation of a 'Great One' score which maximizes the forecasting of criteria by summing appropriately mapped personality variables.

#### Originality/Value

The methods of creating overall scores have not been investigated on the criterion and predictor side simultaneously.

## Personality Assessment: Addressing some Methodological Questions

Chair: *Ilike Inceoglu (SHL Group) [ilke.inceoglu@shl.com](mailto:ilke.inceoglu@shl.com)*

Facilitator: *Cornelius König (Saarland Univ.) [ckoenig@mx.uni-saarland.de](mailto:ckoenig@mx.uni-saarland.de)*

#### State of the Art

Personality measures have become well-established in assessing people for selection and development. Evidence of their validity in predicting competencies and later job performance has been accumulating. Yet there are still open methodological questions some of which have been discussed in the recent literature, relating to the factor structure of personality, effects of response formats on responding and creating personality measures dynamically using approaches of multidimensional Item Response Theory (IRT).

#### New Perspective/Contribution

The first paper examines crossloadings in factor structures of the Big Five and their impact on scores and consequently selection decisions. The second paper continues with the discussion on the structure of personality by investigating whether there is evidence for a General Factor of Personality (GFP) with two versions of a multi-construct personality questionnaire, using a rating scale and a forced-choice format. In the third paper, we focus on response processes in personality assessment by examining effects of Likert ratings and ranking responses on response behaviour. The final paper provides evidence to support the automated construction of personality instruments using multidimensional IRT scoring models.

#### Conclusion and Implications for Research/Practice

This symposium addresses methodological questions in personality assessment that have clear implications for practice, for example the

impact of factor structures on selection decisions, potential biasing effects of specific response formats on scores and scientific assumptions for creating personality instruments on the fly.

### **The not-so-simple structure of personality: What is the impact on selection rates?**

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#### **Purpose**

Personality is often described using five broad factors ('Big Five'). However, the postulated simple structure of personality could not be confirmed in confirmatory factor analyses (CFA), casting doubt on the construct validity and hence utility of personality inventories. Based on two widely used personality measures, we examined the impact that the crossloadings, i.e. additional links between subscales and factors, have on scores and consequently selection decisions.

#### **Design/Methodology**

CFA was applied to 16PF and the NEO PI-R data (N=620) to establish which subscales should be added to each factor to achieve acceptable model fit. Modified scores incorporating these subscales were computed for each candidate. Selection decisions based on scores from the original and the modified models were compared.

#### **Results**

The change in rank-order of the candidates was minimal and reject/accept-decisions remained the same for almost all candidates.

#### **Limitations**

The study is an empirical illustration and not aimed at determining what the "true" model of personality is. Also, we tested only sets of cut-offs for two job profiles. Selection rates may be slightly different other job profiles.

#### **Research/Practical Implications**

These results imply that accounting for crossloadings suggested by CFA when computing Big Five scores results in very small differences in selection decisions. Thus, practitioners can be confident that the current personality model can be considered a justifiable simplification of reality.

#### **Originality/Value**

To our knowledge, this is the first study to examine what impact a not-so-simple structure of personality as suggested by CFA has on selection decisions.

### **The factor structure of the OPQ: is there a basis for a general factor of personality?**

Mathijs Affourtit (SHL Group)  
[Mathijs.Affourtit@shl.com](mailto:Mathijs.Affourtit@shl.com), Ilke Inceoglu (SHL Group)

#### **Purpose**

This study extends research on the general factor of personality (GFP) by examining data collected with the Occupation Personality Questionnaire (OPQ).

#### **Design/Methodology**

In the recent literature the structure of personality has gained new interest. There is ongoing debate on whether personality can be represented by one factor or whether this factor represents methodological or statistical artifacts (bias). Previous studies have focussed on measures of the Big Five using rating scale instruments. This study will apply the research methodology employed by previous studies to data collected with both a forced-choice (OPQ32r) and a rating scale format of the OPQ (OPQ32n).

#### **Preliminary Results**

Exploratory factor analysis of the OPQ32r and OPQ32n scales showed a six factor structure that explained 54% and 52% of the variance respectively. The first factor explained 17% of variance in the OPQ32r data and 20% of the variance in the OPQ32n data, not supporting

the notion that one construct (GFP) can explain a large proportion of variance.

#### Limitations

Preliminary results are only based on only two samples and one factor analytical method.

#### Research/Practical Implications

The variance a GFP explains in criterion measures will be examined, and implications for employment decisions will be discussed.

#### Originality/Value

This study extends current research on the GFP that has been focused on Big Five and rating scale instruments, by examining data collected using OPQ and two response formats.

### Personality response processes

*Helen Baron (Independent Practitioner)*  
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#### Purpose

The majority of personality questionnaires used in occupational contexts require either Likert ratings or ranking responses. Both approaches are subject to various biases and benefits. More recently a number of questionnaires have used a joint rating and ranking format to try to elicit the benefits of both response styles. One issue with this approach is whether the requirement to rank has an impact on the ratings as well. This study examines a number of data sets for signs of changes to rating responses.

#### Design/Methodology

Almost 2000 participants completed either a rating only questionnaire or a rating and ranking questionnaire. Two indicators of response style are considered. The first is the frequency of use of the different Likert response categories. The second is the number of tied Likert responses in sets of 4 items.

#### Results

Small but significant differences were found in the pattern of Likert responses between questionnaires with and without a ranking element. There were also fewer tied responses in the ranking conditions. The differences were evident in all but the first few responses in the two conditions.

#### Limitations

These results are based on versions of a single questionnaire in one context. Further work on different questionnaires and samples is desirable.

#### Research/Practical Implications and Originality/Value

The results do illustrate the potential biases in Likert only responses which are often ignored but have implications for the way questionnaire profiles are interpreted. Further research might consider whether rating scores based on combined rating and ranking responses have greater validity when only ratings are used.

### Creating forced-choice assessment instruments 'on the fly'

*Dave Bartram (SHL Group) [dave.bartram@shl.com](mailto:dave.bartram@shl.com),  
Yin Lin (SHL Group)*

#### Purpose

To examine the use of algorithms for generating instruments composed of forced-choice format item triplets, scored using a multidimensional IRT model.

#### Design/Methodology

An alternate form of the OPQ32r, using the same item content and format as the original, was generated using an algorithm. A sample of over 900 people completed both the original and the new form, with counter-balanced orders.

### Results

Scores recovered from the new form using the standard item parameters for OPQ32r gave good construct equivalence (CFI=0.99, RMSEA=0.03). Latent scale correlation matrices independently estimated from the two forms were very similar, with off-diagonal entries correlating to 0.92. Test-retest reliabilities ranged from 0.75 to 0.88 with a median of 0.82. The empirical data were compared to results of a test-retest simulation and were found to match very closely to the simulated data.

### Limitations

The research was limited to examining one alternate form. Future research will explore the applicability of these methods to a wider range of content.

### Research/Practical Implications

Forced-choice item triplets can be constructed using an algorithm and the functioning of resulting assessment instruments are predictable from the original item parameters. Furthermore, simulated data closely matches real data. This supports the use of simulations for testing instrument construction algorithms in the future.

### Originality/Value

This research provides evidence to support the automated construction of self-report measures using multidimensional IRT scoring models. This is important for the development of multiple fixed forms as well as adaptive testing used forced-choice format that are more complex than item pairs.

## A New Approach to Psychometric Assessment in Human Capital Management

Chair: Harald Ackerschott (*ackerschott and associates, DE*) [ha@ackerschott.eu](mailto:ha@ackerschott.eu)

Facilitator: Dr. Dorothea Klinck (*German Federal Employment Agency, DE*)  
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A psychometric measurement suite is presented which generates new ways and perspectives to measure, interpret and integrate data.

A competency orientated, numbers based approach, that delivers results in a integrative way to produce data, that

- result in HR decision making advantages,
- integrate in Human Capital Management systems and
- serve as decision base for personal development and workforce planning

thus optimizing value generation.

The measurement approach, the result generation and interpretation are presented and discussed. Especially, the curvilinear relations between measures and job performance are discussed and combined with a framework for an innovative measurement approach of behavioral preferences. Two aspects of recruiting are analyzed from the perspectives of this new measurement approach: diversity and the shortage of skilled professionals in certain areas of expertise.

To give an example of context, market requirements concerning HR management of senior staff is presented and related to the new diagnostic system.

### ***Presentations of the Symposium***

#### **The abcî - Ackerschott basic cognitions indicator**

Annika van Veen (*ackerschott and associates, DE*) [av@ackerschott.eu](mailto:av@ackerschott.eu), Jelena Strache (*ackerschott and associates, DE*), Harald Ackerschott (*ackerschott and associates, DE*)

### State of the art

Changing conditions in Human Capital Management (data security, equal rights policies, inclusion and diversity) bring a change into personnel selection. Instruments have to be reviewed and attuned. The current development paves the way for objective selection procedures like psychometric assessments and other measurement tools if they are applied properly.

### New perspectives

The abcl has been developed as an online-based psychometric assessment tool, which can be used in personnel selection for an objective measurement of the fit of candidates to a position or career path. The appropriate view is the pre-selection of candidates before inviting them to an interview. The discussion about personality questionnaires showed that it cannot be (yet) decided if social desirability is content or source of error. Therefore, our approach focuses on new combinations of intelligence measures and innovative item design to measure behavioral preferences. The question is posed if personality measurement is adequate for personnel selection procedures.

The dimensions of measurement, the ways to measure and the interpretations of the scores (curvilinear relationships to performance, Le et al., 2011) are presented.

### Practical implications

Personnel selection procedures can be dealt with in an objective way. Beyond that, psychometric assessments can provide HR managers with additional information in accordance with current juridical developments.

### Originality / Value

The abcl offers innovative measurements on cognitive potential and behavioral preferences. Measures are integrated and interpreted using innovative algorithms and behavioral preferences are measured objectively, not

necessitating the use of personality questionnaires.

## Theoretical background on the abcl

*Harald Ackerschott (ackerschott and associates, DE) [ha@ackerschott.eu](mailto:ha@ackerschott.eu), Annika van Veen (ackerschott and associates, DE)*

### State of the art

Many psychometric assessment tools are available, however, many of them focus on one or only a set of characteristics, e.g. leadership qualities, sales qualities etc. Different models are established, Big Five and other numbers are on the market, even if Big Five dimensions only seldom show powerful predictive validity (Hülsheger & Maier, 2008).

The presented approach assesses basic potentials in performance and behavioral tendencies that can be combined to answer various questions with regard to the fit of a candidate to a specific position or a career path in an objective way.

The presented approach fills the gap between the demands of employers with regard to necessary information. It consequently analyses key performance predictors and makes them measurable.

### New perspectives

The theoretical background and the psychological conceptual preliminary considerations on the development of the abcl will be discussed.

Findings from literature review, empirical perspective and implications derived from these findings are presented.

### Practical implications /Value

By measuring a defined number of significant, fundamental characteristics that allow combined interpretation to answer most relevant HR questions, the comparability of data across countries, functions and hierarchies makes possible an integrated talent analytics and



human capital management approach, that is based on numbers.

### **The aging employee – An Unknown entity? Challenge to handle strategic human capital management in times of demographic change**

*Dr. Jörg Korff (EnBW, DE) [joerg.korff@korfff.de](mailto:joerg.korff@korfff.de)*

#### State of the art

Demographic change is a big challenge for HR for all functions in all sorts of companies. The outlook on the demographic change points to an acceleration. Birth rates are continuously going down and the agenda is set by deficit models of aging.

#### New perspectives

The aging process is looked at in a different way. Deficits are counteracted by positive and neutral developments in aging. Cognitive competences are differentiated in their development and motivational factors are considered and analyzed.

#### Practical implications

Two questions are answered:

1. Which Human Resource practices are necessary and adequate for Human Resource management that differentiates the age of staff?
2. Which are the underlying processes of Human Resources practices in terms of work efficiency relevance?

#### Originality / Value

The perspective of the employer and the employee are analyzed in their interdependence. The deficit model is reflected and replaced.

### **Psychometric testing as an answer on demographic change in human capital management**

*Jelena Strache (ackerschott and associates, DE) [js@ackerschott.eu](mailto:js@ackerschott.eu), Johanna Beckert (ackerschott and associates, DE)*

#### Purpose

Older candidates often face a serious disadvantage when assessed psychometrically since their processing speed may have decreased over time. Their capacity to learn may be underestimated in cognitive reasoning tasks with a time constraint. Knowledge tasks however could give an indication of the time and effort spent in acquiring new knowledge. Knowledge generally is accumulated with age and not diminishing like thinking speed. In the presented research, a study was carried out to investigate the relation of age with the score on knowledge tasks as well as a time limited cognitive reasoning task.

#### Design/Methodology

Candidates for two positions, one entrance level with mainly younger candidates, one senior level with mainly older candidates were compared in their scores on a psychometric assessment. The groups were paralleled with respect of their educational level. The mean scores on a cognitive reasoning task (matrices) as well as the score on task with knowledge questions in the two groups were compared.

#### Results

The results of the comparison of the age groups in the speeded cognitive reasoning task as well as the power condition and the knowledge task will be presented and discussed.

#### Research/Practical Implications

A more differentiated assessment of cognitive abilities and skills could take into account the decreasing mental speed with age.

#### Originality/Value

Cognitive testing can provide better predictive validity through different age groups.

## Objective psychometric measures facilitate diversity management

Johanna Beckert (*ackerschott and associates, DE*) [jb@ackerschott.eu](mailto:jb@ackerschott.eu), Harald Ackerschott (*ackerschott and associates*)

### Purpose

The main determinant of the continuity of discrimination in personnel selection is the reciprocity tendency (Ackerschott, 1989). The reciprocity tendency says that the selector selects a person that is similar to him/herself. One main externally visible attribute is the gender. It is easy to determine whether a person is of similar or opposing gender. Skin and age are equally easy to be perceived. A lot of research has shown that people take different selection decisions if they neither see a picture of the respective candidates nor have any further information on social background, origin, age or gender.

### New perspectives

In different samples we could show that the differences in representations of upper management positions could be easily corrected if choices would rather be based on psychometric tests than on intuitive personnel selections, as can be observed in interviews and assessment centers, which are based on interactive tasks.

### Practical Implications

Diversity management can be facilitated by using psychometric measurement procedures as no reciprocity tendencies can interfere in an objective pre-selection of candidates for upper management positions.

### Originality/Value

The new abci lowers the threshold of test use, because its easy evaluability and its easy integration in overall Human Capital Management.

## European Network of Selection Researchers (ENESER) Symposium on Selection & Assessment in Europe

Chairs: Ioannis Nikolaou (*Athens Univ. of Economics and Business*) [inikol@aueb.gr](mailto:inikol@aueb.gr), Neil Anderson (*Brunel Univ., UK*) [Neil.Anderson@brunel.ac.uk](mailto:Neil.Anderson@brunel.ac.uk)

The proposed symposium organized under the auspices of the newly established European Network of Selection Researchers (ENESER-[www.eneser.org](http://www.eneser.org)) deals with a number of important issues in European employee recruitment and selection research.

The first study explores the role of the Five-Factor model of personality, core-self evaluations and proactive personality as predictors of job performance in a sample of Spanish nurses. Proactive personality moderated significantly the relationship between both CSE and job performance and also between expertise and job performance. The second study presents the findings of a study exploring cross-cultural reactions to the employment interview across four countries (USA, Canada, Greece and Turkey). The findings demonstrated important differences between countries and especially between East (Greece-Turkey) and West (USA-Canada). The third study explores high-stakes selection in the UK, a very important issue in selection research. This study integrates research on the long-term predictive validity of knowledge tests, low-fidelity simulations (SJTs), and high-fidelity simulations (ACs) in advanced level high-stakes settings. Finally, the fourth study explores the predictive validity of the ETS Personal Potential Index (PPI) in the Netherlands. PPI is a web-based tool that allows evaluators to provide reliable applicant-specific information about a number of key attributes that graduate deans and university faculty have identified as essential for graduate study.

Overall, the four studies move forward selection research in Europe presenting research from a number of different European countries (along with US and Canada).

### ***Presentations of the Symposium***

#### **Beyond the Big Five: CSE and proactive personality as predictors of job performance in nursing staff**

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##### **Purpose**

A considerable volume of previous research on personnel selection has explored Big five personality characteristics as predictors of job performance. There are also other personality constructs that could be useful in predicting variance in job performance, such as core-self evaluations (CSE) and proactive personality. Whereas CSE refer to the appraisals people make about their self-worth and capabilities, proactive personality represents a disposition to initiate change (Judge et al., 1997; Parker et al., 2006). This paper explores the predictive-ness of CSE, proactive personality, and expertise over and above Big five personality characteristics on supervisory ratings of job performance.

##### **Design/Methodology**

A sample of 154 nurses and their supervisors from Spanish public hospitals was used. The data was analyzed by means of HLM.

##### **Results**

The relationship between CSE and job performance was significantly more positive at higher levels of proactive personality. The positive relationship between expertise and job performance was fostered at higher levels of proactive personality.

##### **Limitations**

We used cross-sectional research design. The study was conducted only on the sample of nurses and hence it lacks generalizability of results.

##### **Research/Practical Implications**

Our findings will be presented in comparison to the matched English sample of nurses to draw implications for selection of best performing nurses in two very different national contexts.

##### **Originality/Value**

To date very little research has addressed the role of different personality constructs in predicting job performance over and above Big five characteristics. This study aims to fill this gap by also drawing cross-national comparisons between Spanish and English nurses.

#### **Cross-cultural examination of applicant reactions to the employment interview**

*Ioannis Nikolaou (Athens Univ. of Economics and Business) [inikol@aueb.gr](mailto:inikol@aueb.gr), Talya N. Bauer (Portland State Univ., US), Ana Costa (Portland State Univ., US), Berrin Erdogan (Portland State Univ., US), Julie McCarthy (Univ. of Toronto, CA), Burcu Rodopman (Bogazici Univ., TR), Donald Truxillo (Portland State Univ., US)*

##### **Purpose**

The employment interview is the most widely used selection method across the globe. Previous studies on applicant reactions have shown that it is the most well-perceived selection method, giving the opportunity to candidates to meet in person with recruiters (Anderson, Born & Cunningham-Snell, 2001). The current study explores whether there are any cross-cultural differences in applicant reactions towards the employment interview across four countries (USA, Canada, Greece and Turkey).

##### **Design/Methodology**

Active job seekers completed existing questionnaires measuring perceptions of the inter-

viewer, organizational justice and attractiveness, behavioural intentions, the existence of alternative job opportunities, job attractiveness and perceptions of the company's perceived organizational support (POS) following a cross-sectional approach. Sample sizes varied between countries (Greece N=238, USA N=128, Turkey N=132, Canada N=88), with data collection being still in progress.

#### Results

The results demonstrated differences among countries in interviewers' perceptions with US and Canadian applicants demonstrating more positive reactions compared to Greek and Turkish candidates. Similar findings were obtained with regard to organizational justice and organizational attractiveness. Finally, Canadian and US applicants scored higher in POS compared to Turkish and Greek applicants.

#### Limitations

The study used a cross-sectional sample with the participants facing different interviews / interviewers, being interviewed for various positions.

#### Research/Practical Implications

Our findings supported the major differences existing in interviewing and applicants' perceptions between two major clusters, i.e. USA-Canada vs. Greece-Turkey, providing opportunities for further research in this field.

#### Originality/Value

This is the first study in applicant reactions research and literature exploring cross-cultural reactions to the employment interview.

### **The predictive validity of selection in high stakes settings: What value do knowledge tests, situational judgement tests and assessment centres offer?**

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[f.patterson@workpsychologygroup.com](mailto:f.patterson@workpsychologygroup.com)

#### Purpose

In high-stakes selection among candidates with considerable domain-specific knowledge and work experience, investigations of whether high-fidelity simulations (assessment centres, ACs) have incremental validity over low-fidelity simulations (situational judgment tests, SJTs) are lacking. This study integrates research on the long-term predictive validity of knowledge tests, low-fidelity simulations (SJTs), and high-fidelity simulations (ACs) in advanced level high-stakes settings.

#### Design/Methodology

A two-part predictive validity study was conducted using two outcome measures including; (i) supervisor ratings of work performance after 1 year (N=196) and, (ii) performance in a licensure examination (comprising twelve high fidelity job simulations) after 3 years in the job (N=2,550).

#### Results

All three predictors (knowledge tests, SJT and AC) were significantly related to both subsequent job performance ( $p < .001$ ) and outcomes from the licensure examination ( $p < .001$ ). Both the SJT and AC show incremental validity over the knowledge test. Moreover, the AC had incremental validity over the SJT for specific interpersonal dimensions.

#### Limitations- Research/Practical Implications - Originality/Value

A theoretical model of how these three selection methods work in conjunction to predict job performance was developed. Structural equation modeling showed that the SJT fully mediated the effects of declarative knowledge on job performance, whereas the AC partially mediated the effects of the SJT. These results provide clearer insight into the construct validity of SJTs and ACs, and offer important implications for selection system design in high stakes settings.

### Using the ETS® personal potential index (PPI) for graduate student selection: Evidence from a culturally-diverse student sample

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#### Purpose

Researchers have suggested that soft-skills are important for study success in addition to cognitive predictors. Accordingly, universities are interested in using noncognitive predictors to complement aptitude tests in graduate student selection. The ETS Personal Potential Index (PPI) relies on other-ratings by asking former supervisors to rate applicants regarding a set of soft-skills. The purpose of the present study is to investigate (a) to what degree the PPI is able to predict behaviors that contribute to the social and psychological environment at universities (citizenship behavior) above and beyond the GRE (Graduate Record Examination), and (b) to what degree supervisors accept this procedure.

#### Design/Methodology

Data was collected at Maastricht University, a central European university with an international student body. The sample consisted of 73 students for whom PPI evaluations were available and who were evaluated in terms of their student citizenship behavior by their current course instructors.

#### Results

Results show that the PPI significantly predicted citizenship behavior above and beyond the GRE ( $\beta=.25, p < .01$ ). Furthermore, PPI evaluators perceived the PPI as a fair and valid selection instrument, and rated all six PPI dimensions to be important for future study success.

#### Limitations

Results remain to be replicated in a larger sample.

#### Research/Practical Implications

The PPI is a useful instrument if universities are interested in selecting students who not solely possess high academic skills, but also show citizenship behavior which helps them study successfully.

#### Originality/Value

This is the first study to investigate the validity of the PPI in a European context.

### Position Papers

#### Word-of-Mouth in Recruitment: A Critical Review and Agenda for Future Research

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#### State of the Art

Recruitment is a top priority for many organizations as they struggle to cope with labor shortages. One of the key factors determining organizational attraction is the source through which potential applicants receive employment information. However, research has mainly focused on company-dependent recruitment sources such as advertising, which are directly controlled by the organization to communicate a positive message to job seekers. With respect to company-independent sources such as word-of-mouth, which are not under the direct control of the organization and can provide both positive and negative information, research is scarce (Van Hoye & Lievens, 2009). Even though potential applicants often consult family, friends, and other people about jobs, most studies have treated them as individual decision-makers in social isolation.

In recent years, several studies have demonstrated that word-of-mouth can have a powerful impact on organizational attraction (Collins & Stevens, 2002). However, much less is known about who is most likely to spread and receive word-of-mouth, what organizations can do to stimulate word-of-mouth, what mechanisms explain the effects of word-of-mouth, and the conditions under which word-of-mouth is less or more influential. In addition, despite its independent nature, only a few studies have considered negative word-of-mouth.

#### New Perspective/Contribution

This position paper aims to contribute to our understanding of word-of-mouth as a recruitment source by reviewing and integrating previous research findings as well as by identifying key gaps in our current knowledge and promising directions for future research. To this end, an integrative research model of word-of-mouth is proposed. This model provides an overview of the determinants, moderators, mediators, and outcomes of word-of-mouth, and offers key implications for future research as well as for recruiting organizations.

First, the integrative model suggests that the occurrence of word-of-mouth is determined by the characteristics of the recipient, source, and organization involved. Although research on the determinants of word-of-mouth is scarce, empirical findings so far suggest that job seekers higher in extraversion, conscientiousness, and networking comfort; with higher self-evaluations and networking motives; and with larger social networks containing more strong ties, are more likely to receive employment-related word-of-mouth (Wanberg, Kanfer, & Banas, 2000). In addition, people with higher expertise (e.g., current or former employees), stronger motives (e.g., satisfaction, helping others), and stronger ties to job seekers (e.g., friends, family) more frequently act as a source of word-of-mouth

information (Van Hove & Lievens, 2009). Finally, organizational characteristics such as a strong employer brand, high organizational justice, and a referral bonus program can also stimulate word-of-mouth (Van Hove, 2012).

As indicated in the integrative model, future research should investigate additional recipient (e.g., motives), source (e.g., personality), and organization (e.g., recruitment practices) characteristics as determinants of word-of-mouth. Another promising research avenue would be to investigate how characteristics of the recipient, source, and organization interact to determine word-of-mouth, and how they might moderate the relationship between word-of-mouth and its outcomes.

In addition, the integrative model poses that some other characteristics of word-of-mouth are likely to moderate its effects. First, with respect to valence, research has consistently found that positive word-of-mouth has a beneficial impact on recruitment outcomes (Collins & Stevens, 2002). However, far less studies have investigated negative word-of-mouth and the results are inconsistent (Van Hove & Lievens, 2009). Therefore, future research should take the valence of word-of-mouth into account and pay particular attention to the conditions affecting the impact of negative word-of-mouth. Second, a particularly interesting avenue for future research would be to examine the content of actual word-of-mouth messages (e.g., content analysis) and how this relates to their impact. Third, the specific medium through which word-of-mouth is provided might also affect its outcomes. Given its exponential growth, future research on web-based word-of-mouth seems especially warranted.

Next, the integrative model shows how various process variables might help to explain the impact of word-of-mouth. Up until now, findings mainly suggest that the effects of word-of-mouth can be partly attributed to its



credibility as an independent and personal source of employment information, in line with the source credibility framework (Van Hove, 2012). Future research should include measures of accessibility and diagnosticity to more directly test the predictions of the accessibility-diagnosticity model and explore other possible mediators such as media richness and realism.

Finally, the integrative model suggests that word-of-mouth affects key outcomes throughout the recruitment process. Most previous studies have focused on this part of the model and have found that positive word-of-mouth has a positive effect on (a) job search outcomes such as job offers and finding employment, (b) pre-hire recruitment outcomes including organizational attractiveness and application decisions; and (c) post-hire recruitment outcomes such as job satisfaction and turnover (Collins & Stevens, 2002; Wanberg et al., 2000). Future research should try to incorporate multiple outcome categories in the same study and should also include determinants, mediators, and/or moderators, thus allowing to test the integrative model more completely.

#### Conclusion and Implications for Research/Practice

A critical review of the literature suggests that word-of-mouth is a highly influential source of employment information affecting key recruitment outcomes, and thus warrants more attention from both future researchers and recruiting organizations. The proposed integrative model can serve as a guiding framework for dealing with word-of-mouth in both research (see previous section) and practice. Given that organizations need to look for ways to successfully stimulate word-of-mouth through strategic recruitment decisions and actions, the recipient, source, and organizational determinants identified in the model seem especially useful for them.

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#### Single Papers

##### Development and validation of a digital work simulation to predict workplace deviance

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#### Purpose

Deviant workplace behaviors regularly make headlines. Because of its severe consequences, it may be valuable to be able to assess the tendency for deviant workplace behavior. The aim of this field study was to examine the construct validity (Study 1) and the criterion-related validity (Study 2) of a digital work simulation to predict deviant workplace behavior through the assessment of Machiavellianism and Compliant Unethical Behavior.

### Design/Methodology

In Study 1, participants (N=113) completed the digital work simulation and self-reports of Machiavellianism, Compliant Unethical Behavior, personality, and self-esteem. In Study 2, participants (N=285) completed the digital work simulation and self-reports of Machiavellianism, Compliant Unethical Behavior, and social desirability. Workplace deviance was measured both by self-report and other-report.

### Results

Study 1 showed that Machiavellianism and Compliant Unethical Behavior as measured with the simulation correlated with self-report measures of these constructs. Machiavellianism was related to Agreeableness and Honesty-Humility, and Compliant Unethical Behavior was related to Neuroticism and self-esteem. Study 2 showed that Machiavellianism predicted workplace deviance, and incrementally predicted organizational deviance over and above self-reported Machiavellianism. Furthermore, the simulation was shown to be less susceptible to social desirable answering than self-reports.

### Limitations

Since participation in the studies was voluntarily a self-selection effect may have occurred. We urge replication in a selection setting.

### Research/Practical Implications

The digital work simulation seems to be a promising tool for predicting workplace deviance.

### Originality/Value

Research on simulations often fails to validate these instruments, because of their complexity. This study presents the first validated simulation to predict workplace deviance.

## Development and validation of a situational judgement test measuring leadership skills

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### Purpose

Although situational judgment tests (SJTs) have been in use for decades in the field of personnel selection consensus has not been reached on the debate if SJTs are valid measures for targeting specific constructs (McDaniel & Nguyen, 2001). It has been shown that SJTs are valid predictors for job performance. Still we do not know about the basis of this correlation. The purpose of this paper is to present the development and validation of a video-based SJT assessing six different leadership skills (e.g. cooperation and conflict management, change management) derived from Bartram's model of the great eight competencies of job performance (Bartram, 2005).

### Design/Methodology & Results

In a random sample of N = 500 candidates it is examined whether the different competencies are reflected in the data structure or whether the situation itself dominates the performance scores – as it is the case in an assessment center setting. Moreover, differences in test results between more and less experienced managers are examined with the assumption that experience should lead to overall better results and a better differentiation concerning the structure of constructs due to a more differentiated perspective on the leadership situations. To answer the question of criterion validity the results of the leadership skills SJT are compared to performance data in assessment centers.

### Limitation & Research/Practical Implications & Originality/Value

Implications of the findings are discussed with regard to several application possibilities e.g. as instruments in a preselection process or as additional measures in an assessment center setting generating incremental validity.

### Validity of specific cognitive abilities predicting training success in Germany

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#### Purpose

A large number of studies have unequivocally shown that general mental ability is among the best predictors of training success. However, in Germany, there is an ongoing debate as to whether the measurement of general mental ability for selection purposes is legal. It is therefore important to determine if specific cognitive abilities yield comparable validities. Due to the specifics of the vocational training system in Germany, it is necessary to assess validities merely for Germany and not simply to use the results of European meta-analyses.

#### Design/Methodology

We conducted a meta-analysis ( $k=72$ ) following the approach by Hunter and Schmidt (2004).

#### Results

For six specific cognitive abilities we found operational validities between .18 and .26. Occupational category and occupational relevance of the specific cognitive ability were identified as relevant moderator variables. For some occupational category-specific cognitive ability combinations, validities were substantial, reaching even  $\rho = .49$ . The validity increases with higher relevance of spatial-mechanical ability for the occupation.

#### Limitations

Because of the uniqueness of the German training system the results cannot easily be generalized to other countries.

#### Research/Practical Implications

Further research is needed to clarify why validities of specific cognitive abilities are lower in Germany compared to other countries.

#### Originality/Value

This is the first meta-analysis to investigate occupation-specific validities of specific cognitive abilities in Germany.

### Subgroup score differences in cognitive ability tests: Do scoring methods matter?

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#### Purpose

Cognitive ability tests are widely used in employment selection owing to the fact that they have proven to be the best-available predictors of performance in the workplace. In assessing human talent, one perplexing dilemmas is that cognitive ability tests also show substantial differences between racial or ethnic groups. Consequently, the use of cognitive ability tests often leads to adverse impact-disproportional selection of members of certain racial groups, resulting in social, legal, and scientific debates. Various strategies have been proposed to minimize the mean group difference in cognitive ability tests. The presentation aims to demonstrate the impact of scoring strategies in passage-based (testlet) cognitive tests on mean score differences across ethnic groups.

#### Design/Methodology

Based on data from a passage-based verbal reasoning test ( $N=571$ ), four scoring procedures were compared: Classical Test Theory (CTT) based scoring (number correct), Binary IRT scoring (2PL), polytomous IRT scoring (i.e. treating passages as individual items), and testlet IRT scoring.

#### Results

Consistent with previous findings, significant mean score differences were found when CTT and binary IRT scoring methods were implemented. However, the mean score differences were insignificantly reduced after applying polytomous IRT and particularly testlet IRT model.

### Limitations

The use of passage-based cognitive tests limits wider generalizability and further research using other cognitive ability test formats would be helpful to verify the result across a range of settings.

### Research/Practical Implications

Theoretical and practical implications of scoring cognitive ability tests are discussed in the context of adverse impact.

### Originality/Value

Further debates are called for to re-visit the nature of group mean score difference in cognitive ability tests.

## Enhancing the validity of personality assessment: A threshold-based role profiling approach

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### Purpose

Traditionally multiple correlation has been used to assess the criterion validity of personality measures. However, authors such as McClelland (1973) and Boyatsis (2006) emphasised the importance of thresholds or 'tipping points' in achieving effective performance. Performing below a given threshold is believed to significantly reduce overall performance. The objective of this study was to apply a threshold approach to test if this offers greater validities for personality measurement.

### Design/Methodology

This study combined 11 validation samples where participants had completed the Dimensions personality questionnaire (Holdsworth, 2004), a 160-item, 15-trait work-based measure of personality. The overall sample size was N=831. Two validation approaches were compared using the same dataset: firstly multiple correlation, and secondly applying

a threshold-based 'role profile' approach which gave an overall fit for each participant.

### Results

The analysis indicated a mean validity of  $r=0.34$  from multiple correlation, and  $r=0.44$  with the threshold approach. After applying Fisher's Z transformation, the difference in validities was significant at  $p<0.01$ . The findings support the greater efficacy of a threshold-based approach (Boyatsis, 2006).

### Limitations

Using opportunity samples limits wider generalizability and further samples would be helpful to test the approach across a range of settings.

### Research/Practical Implications

The results suggest that identifying the areas of poor fit between an individual and role may improve predictive outcomes for organisations using personality assessment. Further research to explore possible curvilinear relationships and interaction effects would be helpful.

### Originality/Value

This study demonstrates the improved prediction available from applying an alternative methodology for assessing the validity of personality assessment.

## Positive and maladaptive aspects of personality – Two sides of the same coin?

Steven Fleck (SHL, UK) [steven.fleck@shl.com](mailto:steven.fleck@shl.com), Gillian Hyde (PCL, UK), Dave Bartram (SHL, UK), Ilke Inceoglu (SHL, UK)

### Purpose

Two studies examine the relationships between constructs of the Hogan Development Survey (HDS) and the Occupational Personality Questionnaire (OPQ).

### Design/Methodology

The HDS assesses “dark side traits” in a normal population and has been used in various studies to investigate dysfunctional behaviour at work. The HDS is not a clinical measure, but rather measures dysfunctional personality in the working population using a similar taxonomy to the classical personality disorders. It measures dysfunctional dispositions, underpinned by DSM-IV, Axis 2 personality disorders. The OPQ32 measures 32 narrow personality traits that are relevant in the world of work and predict positive work behaviours. Relationships between the HDS and the OPQ32 (OPQ32i and OPQ32r) were examined in two employee samples ( $N_1 = 98$ ,  $N_2 = 510$ ).

#### Results

HDS and OPQ scales of conceptually similar constructs correlated in the expected direction, with correlations being moderately high. The pattern of results was generally similar across the two studies; only one HDS scale, Reserved, had noticeably different results across the two studies. Overall, the study indicates that many of the constructs measured in both instruments, assessing positive and maladaptive aspects of personality, shared much variance.

#### Limitations

The sample was a mixture of volunteers, opportunistic data and data from individuals completing both questionnaires for assessment or development.

#### Research/Practical Implications

These studies help to understand the overlap between desirable and maladaptive personality traits.

#### Originality/Value

Few studies have systematically examined the shared variance between maladaptive and positive personality at work, looking at specific narrow traits that go beyond the Big Five.

### Job analytics – Estimating competency requirements from prior job analysis data

Dave Bartram (SHL Group, UK) [dave.bartram@shl.com](mailto:dave.bartram@shl.com), Steven Fleck (SHL Group, UK)

#### Purpose

We consider the degree to which information about the occupational category a job belongs to accounts for variance in the importance assigned to competencies. This is important in determining the degree to which competency requirements for jobs are valid reflections of their true importance.

#### Design/Methodology

We report a multi level analysis (MLA) of over 6,000 detailed job analyses that were coded under the O\*NET SOC system and assigned O\*Net job zone ‘level’ codes. For each job, the importance of each of the SHL UCF 20 competency dimensions had been determined through detailed job analysis.

#### Results

The variance accounted for by SOC code and job zone varied substantially between competencies. Some competencies are very predictable (e.g. over 33% of the variance in job importance ratings for ‘Following Instructions and Directions’ is accountable for by job zone and SOC code). Others are less so: ‘Adapting and Coping’ has at less than 8% its variance accountable for by job zone and SOC code.

#### Limitations

The sample covered most of the jobs contained in the SOC system.

#### Research/Practical Implications

This has implications for the degree to which the importance of different competencies are generalisable across jobs within SOC categories.

#### Originality/Value

Job competency profiling is a common method of defining the requirements people must meet in order to be selected for a job. Typical-



ly, competency requirements are defined idiosyncratically. The present research is innovative in using MLA to provide the basis for developing decision support systems improving the relevance of competency profiling.

### **Job analytics – Using a Bayesian inference engine to assess the influence of context on job competency requirements**

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#### **Purpose**

Contextual characteristics such as size of organisation and degree of managerial responsibility are likely to influence the relative importance of competencies for a job. We outline how a Bayesian inference engine can be used to generate probabilistic estimates of job competency importance, and to determine the influence of contextual variables on job requirements.

#### **Design/Methodology**

We report on the development of a Bayesian inference engine that generates predictions of job competency importance by drawing on a large database of job analysis data. For a sample of more than 6000 jobs, estimated competency importances are compared to generic occupation category (SOC) competency profiles and to detailed job analysis results, in order to determine the influence of specific job context information on the accuracy of the estimated competency importances.

#### **Results**

When referencing generic SOC competency profiles, 27% of competency importances are at the exact same importance level as those revealed by detailed job analysis of the job. In contrast, when job context is taken into account, 54% of the estimated competency importances are identical to those identified from individual job analysis.

#### **Limitations**

The sample covered most of the jobs contained in the SOC system.

#### **Research/Practical Implications**

This has implications for building systems to estimate job requirements based on large volumes of prior job analysis data, which can speed up job analysis and to generate benchmark job competency profiles.

#### **Originality/Value**

A data-driven, Bayesian approach to determining job competency requirements is a novel contribution to the field of work and organizational psychology.

### **The incremental predictive validity of emotion regulation in high emotional labor sales jobs**

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The present study investigates the predictive validity of four facets of emotional intelligence on sales ratings and sales results in high- and low emotional labor saleswork. The facet emotion regulation was expected to be incrementally valid for predicting sales performance, but only in high emotional labor sales work. None of the EI facets were expected to effectively predict sales performance in low emotional labor jobs. Big Five personality, cognitive ability, emotional intelligence, sales ratings and sales results were measured in a sample of low (N = 405) and a sample of high (N = 105) emotional labor sales employees. The results suggest that emotion regulation effectively predicts objective sales results but not sales ratings and only in high emotional labor sales work. The results suggest that using EI measures during sales assessments in low emotional sales jobs would not add much variance to a personality and cognitive ability measure. Only in high emotional labor sales



work would EI add predictive validity to personality and cognitive ability and only when the goal is to predict sales results. A limitation of the study is that the low and high emotional labor samples have differences which may have affected the results and implications of the study.

### **Classical and transversal cognitive skills in individual occupational careers**

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#### **Purpose**

Successfully understanding and predicting career engagement over individual occupational histories is a major goal with high real world relevance. In 21<sup>st</sup> century, non-routine skills become much more important whilst routine skills are decreasing. Thus, new skills such as transversal problem solving skills may become increasingly important beyond classical cognitive skills. These leads us to our research question: Which individual determinants are more important for lifelong learning - classical or transversal cognitive skills? Our aim was to identify predictors of professional development and, thus, give new insights for personnel selection.

#### **Design/Methodology**

We analysed the relationship between professional development and classical cognitive skills (intelligence), transversal cognitive skills (problem solving) and further predictors (e.g. level of high school certificate, job classification, motivation) of 230 employees.

#### **Results**

Analyses with structural equation models supported the hypothesis that transversal skills are the best predictor for professional development.

#### **Limitations**

Because of the cross-sectional design the question about the causality could not be answered. We focused only on individual aspects, not on the environmental influences.

#### **Research/Practical Implications**

Companies should not solely rely on classical cognitive skills such as intelligence. In fact, transversal skills (like problem solving) are a better predictor for professional development. Therefore, these skills should be considered in personnel selection if a company wants to hire people who are able to handle the changing and complex demands in the 21<sup>st</sup> century.

#### **Originality/Value**

This study shows that tests of classical cognitive skills are not anymore the best choice for personnel selection.

### **Impression management and objective job performance**

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#### **Purpose**

Although theoretical arguments suggest that impression management should be related to job performance, empirical results have been unsupportive of the association. We argue that this relationship, however, may be found for sales personnel which require complex social interactions where presenting oneself in a socially desirable manner is important for job success.

#### **Design/Methodology**

The first sample utilized a concurrent design and found significant correlations between impression management and objective job performance. Impression management demonstrated incremental validity over con-

scientiousness. Using a different impression management scale and a predictive design, in the second sample we found that although impression management was unrelated to supervisor ratings of job performance, it was related to objective job performance, and showed incremental validity over cognitive ability.

#### Results

We found that impression management was related to objective job performance. Moreover, impression management also showed incremental validity over two commonly used predictors: conscientiousness and cognitive ability. There was very limited evidence for differential prediction, with one of the impression management scales in Sample 1 overpredicting performance for female respondents.

#### Limitations

First, we only used samples from Romania. Second, our second sample consisted of employees from a single organization. Third, we could not examine if IM has incremental validity over both Conscientiousness and cognitive ability, as the participating organizations refused to allow the inclusion of additional measures.

#### Research/Practical Implications

We encourage usage of social desirability scales in the prediction of job performance in interaction-intensive contexts.

#### Originality/Value

Empirical studies have had limited success so far in uncovering the link between social desirability and job performance. This research addresses this limitation.

### **Reducing unplanned loss through transverse resource practice offshore**

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#### Purpose

Transverse use of resources and virtual management may be the best sustainable option in a market where resources are getting scarcer and more individuals sustained with fewer laborers. It requires smarter and increasingly automated ways of working.

#### Design/Methodology

The model entails an overall responsibility for maintaining the integrity of certain equipment through condition and project based maintenance in Oil and Gas production. Tasks, responsibility and professional resources are organized in one unit for multiple installations. Engineers, executing personnel, planners, condition monitoring, and follow up are gathered in one organizational unit.

#### Results

The model contributes to a substantial reduction in unplanned production loss. It allows one of the top ten international oil and gas companies to plan approximately 1000 maintenance and improvement campaigns across 29 installations yearly, 80% as delivered on plan, with a serious incident frequency (SIF) of zero and they receive positive "client" feedback on their customer satisfaction survey.

#### Limitations

Unions fight to keep the number of positions and beneficial contracts offshore. In addition they argue that there are quite extensive equipment and system differences between installations. Without the proper installation knowledge, dangerous situations may arise. The conflicts and issues have been managed through principles of collaboration technology and understanding human factors.

#### Research/Practical Implications

The model allows synergies, unique experience transfer and establishment of best practice. More work is completed with fewer resources using them across installations.

### Originality/Value

The organizational model can be applied across a multitude of disciplines. It is a holistic model for condition and project based work.

### **Estimating the economic impact of personnel selection tools on counterproductive work behaviors**

*Saul Fine (Midot, IL) [saoul@midot.com](mailto:saoul@midot.com)*

#### Purpose

Well established methods are available for estimating the monetary value of tests used to predict job performance in personnel selection. However, similar methods for estimating the value of tests used to predict counterproductive work behaviors (CWB) have not been well researched. This paper presents two possible techniques for studying the latter issue.

#### Design/Methodology

The first technique is based on an adaptation of the Brodgen-Cronbach-Gleser (B-C-G) utility formula, using rational estimates of  $SD_y$  for overall CWB. The second technique is based on tests' true-positive rates, and the mean monetary damages caused by specific CWB incidents (e.g., theft). Anecdotal validity evidence using an integrity test administered to 2,456 job applicants from eight different industries is then used to demonstrate the utility of each technique.

#### Results

The results of the first technique yield an estimated utility of more than \$4.9 million dollars annually for prevented CWB. The results of the second technique estimate more than \$29,000 in reduced thefts alone, among a subset of job applicants from the retail industry.

#### Limitations

Further research is still needed in this area to provide more accurate estimates of  $SD_y$ , before these techniques can be generalized.

### Research/Practical Implications

The techniques presented here provide important practical approaches for practitioners and researchers wishing to estimate the utility of tools designed to reduce CWB.

### Originality/Value

While similar group-level utility estimates already exist (e.g., based on time series studies), to our knowledge, no individual-level formulae of this kind are available for predicting the utility of reduced CWB among job applicants.

### **Improving test performance by cognitive training: Implications for employment testing**

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#### Purpose

For many years, it has been widely acknowledged that fluid intelligence and therefore the performance in tests cannot be trained. Recent research questions this notion. Jaeggi and colleagues (Jaeggi, Buschkuhl, Jonides, & Perrig, 2008) found that fluid intelligence can be improved by training the working memory.

#### Design/Methodology

We analysed data from our cognitive training programme with more than 50,000 participants of different ages, educational backgrounds and occupations. Participants repeatedly completed tests assessing different aspects of human intelligence such as reasoning, short term memory, and concentration.

#### Results

We found cognitive training to lead to a quite stable upward trend in test performance. The average performances of trained individuals lie significantly above the average performances of untrained individuals.

### Limitations

As participants completed the tests from their home computers, it was impossible to control the conditions under which they worked on the tests. Furthermore, we did not analyse transfer effects to other life domains.

### Research/Practical Implications

In the session, it will be discussed what implications these results have for employment testing. What do the results mean for the reliability and validity of tests? Will a trained person also perform better on the job than an untrained person? How can we assess a person's training level, and how can we take different training levels into account in a selection setting?

### Originality/Value

To our knowledge, the study by Jaeggi and colleagues has not received much attention in Europe. However, its implications especially for assessing potential in employment testing are wide and should be addressed more by science as well as practice.

## Innovations in leadership assessment: a case study from Deutsche Telekom AG

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### Purpose

Deutsche Telekom recognizes the utility of psychometric measurement to grow leadership talent but finding tools that completely meet their unique competency model was proving a challenge. This paper describes how they met this challenge and the benefits of the solution they chose.

### Design/Methodology

Searching for a time-efficient way to objectively assess their competence model, Deutsche Telekom found the Business-focused Inventory of Personality (BIP), showed reasonable but not total coverage. In cooperation with the test authors at the Ruhr-University in

Bochum, an empirical study was undertaken to extend and tailor the BIP to the specific assessment needs at Deutsche Telekom.

### Results

Deutsche Telekom now uses this tailored version of BIP along with a measure of leadership judgement, across a variety of selection and development contexts.

### Limitations

The tailoring of existing tests to specific contexts requires greater investment of time and other resources than using an 'off the shelf' test but as this case shows, the return on investment makes it worthwhile.

### Practical Implications/Originality/Value

The choice for companies is often seen as being 'off the shelf' vs. tailored testing but Deutsche Telekom found that there is a middle road. The tailoring of an existing test increases the match to local assessment needs in a more cost-effective way than building a brand new metric. In the future the demand for these kinds of projects with international organizations will increase as the assessment of specific competence models for establishing innovative and competitive business practices becomes an essential component of success.

## Relationships between personality and career evaluations after the world economic crisis 2008/2009

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### Purpose

Economies and markets become increasingly volatile. Therefore, it is worthwhile to investigate how working adults react to changes which are beyond their control but still influence their careers. Personality traits may compensate for stressful events. This study

investigates how personality traits from three conceptual approaches as well as from trait and facet levels differentially relate to evaluations of individual careers in the face of an economic downturn.

#### Design/Methodology

German working adults (N=260) completed the Hogan Personality Inventory, Hogan Development Survey, and Motives Values Preferences (Hogan & Hogan, 2007, 2009, 2010) and evaluated potential consequences of the world economic crisis 2008/2009 on their future careers (e.g. chances on the job market, Steinbach & Partner, 2008) online.

#### Results

Employees with higher scores on ambition ( $r = .32$ ), colorful ( $r = .27$ ), and power ( $r = .26$ ) and lower scores on guilt ( $r = -.30$ ), excitable ( $r = -.32$ ), and cautious ( $r = -.30$ ) tend to evaluate their career more positively (favorable personality profile) than employees with opposite personality profiles.

#### Limitations

The majority of the German speaking sample has leadership responsibilities (67%) and is male (79%), thus potentially reducing generalizability.

#### Research/Practical Implications

Future research should investigate a) whether the results generalize to a representative workforce across countries, b) whether employees with favorable personality profiles actually perform better during economic crises, and c) which (situational) factors might help employees with less favorable profiles to still evaluate their career positively.

#### Originality/Value

To our knowledge, this study is the first to link personality traits to variables related to the economic crisis in Germany (2008/2009) and therefore could also have implications for the current Euro-crisis.

### Psychometric assessment as a tool to solve the problem of skills shortage

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#### State of the art

Germany faces a shortage in experts, especially in the IT industry, the technical field such as robotics etc. The discussion about how to solve this problem shows numbers of options pointing in different directions. Major approaches are the renovation of technical training, marketing for girls in technical professions, employing old staff longer etc.

#### New perspectives

An alternative approach to the skills shortage will be presented. The very restricted pre-selection procedures have to be replaced by procedures that are also open to candidates without all the exact skills requested to fill an opening. Instead of solely relying on existing expertise, psychological measures of potential (g) can identify candidates with the willingness and the prerequisites to acquire the relevant knowledge and to quickly grow into the expert role.

#### Research/Practical Implications

Most answers to the skills shortage problem of the German industry leave open the question of prognostic validity or will have only long-term impact. The presented approach opens a quickly applicable perspective and solutions.

### Applicant reactions to selection procedures and outcomes: A field study

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#### Purpose

Many applicant reactions studies have been conducted in laboratory settings, limiting external validity. The study reported in this pa-

per examined actual applicants' reactions after receiving a selection outcome (hired/rejected) based on an interview. In addition, the extent to which applicants' procedural and distributive fairness perceptions influence this relationship was examined. We expected selection outcome and fairness perceptions (procedural /distributive) would interactively influence applicants' well-being and organizational perceptions.

#### Design/Methodology

To test these assumptions, we conducted a longitudinal survey in a field setting, with actual job applicants. Participants filled out the first questionnaire after applying for a job, before their interview (N T1 = 389) and a second after receiving their selection decision (N T2 = 198).

#### Results

Moderated regression analyses largely supported our hypotheses. As expected, applicants who were hired reported highest well-being as well as organizational attractiveness when they perceived the outcome as fair. Surprisingly, rejected applicants reported highest well-being and organization attractiveness when they perceived the outcome as unfair. Procedural fairness positively affected organizational attractiveness of applicants who were rejected only.

#### Limitations

Because procedural and distributive fairness perceptions were measured simultaneously, it is possible that perceived procedural fairness was by influenced outcome fairness.

#### Research/Practical Implications

These results imply that increasing procedural fairness perceptions, e.g. by better informing their applicants, is worthwhile, both for applicants and organizations.

#### Originality/Value

To our knowledge, our study is the first to analyse the combined effects of selection out-

comes and fairness with actual applicants, both before and after interviewing in a non-profit organization.

### Effects of individual differences on the perceived fairness of an operational assessment center

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#### Purpose

Knowing to which extent applicant reactions are related to stable individual differences instead of characteristics of the specific selection procedure is important for the administration of the procedure and for dealing with candidates. However, relationships between individual differences and applicant reactions are still largely unexplored. Therefore the aim of the present study was to explore relationships between individual differences (age, cognitive ability, the Big Five, positive and negative affectivity, core self-evaluations, and performance motivation) and candidates' perceptions of selection fairness. Furthermore, we had a particular focus on the concept of social validity by Schuler (1990).

#### Design/Methodology

During an operational assessment center (AC) 313 candidates completed a cognitive ability test and filled out a questionnaire that measured the additional individual differences constructs. After the AC, participants completed a questionnaire concerning their perceptions of fairness during the AC.

#### Results

Candidates who scored high on emotional stability, core self-evaluations, performance motivation, and positive affectivity perceived the AC as fairer. Conversely, negative affectivity was negatively correlated with fairness



perceptions. Conscientiousness, agreeableness, and extraversion showed low positive correlations with some fairness dimensions.

#### Limitations

It remains to be tested how individual differences are related to fairness perceptions after applicants received AC feedback and are informed about the outcome of the AC.

#### Research/Practical Implications

These results imply that the nature of the applicant pool should be considered in the construction of selection tools.

#### Originality/Value

The results show that applicant reactions are not only dependent on characteristics of a selection procedure but also on characteristics of the applicants.

### **The relation between assessment center overall dimension ratings and external ratings of the same dimensions**

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#### Purpose

The construct-related validity of ACs is usually evaluated on the basis of dimension ratings obtained after the completion of each exercise. However, concerns have been raised about this internal construct-related validation approach. Instead, it has been proposed to examine the external construct-related validity of ACs by focusing on overall dimension ratings. Therefore, we examined AC construct-related validity by relating AC overall dimension ratings to ratings of identical dimensions from sources external to the AC.

#### Design/Methodology

We analyzed data from three samples, two from field settings ( $N=428$  and  $121$ ) and one from a laboratory setting ( $N=92$ ). Thereby,

supervisors, customers, and candidates themselves, respectively, represented external sources.

#### Results

Different dimension-same source correlations within the ACs were larger than same dimension-different source correlations. Moreover, confirmatory factor analyses revealed source factors but no dimension factors in the latent factor structure of the data. Thus, no support for the external construct-related validity of AC dimensions was found.

#### Limitations

A possible limitation is that we compared AC overall dimension ratings (= maximum performance indicators) to external ratings that referred to typical performance situations.

#### Research/Practical Implications

We recommend focusing more on specific aspects of AC performance that are related to job performance than on dimension ratings when making personnel decisions. Furthermore, ACs and multisource feedback should be regarded as different methods that provide different perspectives on candidates' performance.

#### Originality/Value

This study is the first to investigate the external construct-related validity of ACs by relating AC overall dimension ratings to external ratings of the same dimensions.

### **Applicant personality traits and fairness perceptions in group selection interviews**

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#### Purpose

The purpose of the study was to examine how job applicants' personality traits shape their reactions to being interviewed in a group setting.

### Design/Methodology

Job applicants ( $N = 97$ ) applying for positions as high school teachers rated their personality traits prior to being interviewed in groups (3-5 applicants per group). After the interview, but prior to receiving the hiring decision, applicants rated their perceived fairness of the group interview.

### Results

Higher scores on the personality traits extroversion and agreeableness were related to higher levels of perceived fairness of the group interviews. Higher scores on the personality trait neuroticism were related to lower levels of perceived fairness.

### Limitations

The study focuses on a specific occupational group (i.e., teachers) and the generalizability of the findings across individuals in different occupations and organizations needs to be addressed in future research.

### Research/Practical Implications

The results of the study indicate that individual differences among applicants are important for their reactions to group selection interviews. This suggests that applicant personality needs to be taken into account in research on applicant reactions. Moreover, the results suggests that group selection interviews are likely to be more positively perceived when the applicant pool is made up of individuals who are more emotionally stable, extroverted and agreeable.

### Originality/Value

To the best of our knowledge, this is the first field study of applicants' fairness perceptions of group selection interviews.

### Observations on analysis, strategy and cooperation in the assessment center

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### Purpose

The Assessment Center has become established as a diagnostic method in personnel selection. The exercises conducted in an AC, however, have not changed for some years. This said it is safe to underline that hardly any innovative exercises have been developed for AC.

This paper presents a new playful method for an exercise designed to examine the constructs "analytic& strategic thinking" and "willingness to cooperate". The exercise was developed as previously used methods were considered inadequate for examining these particular constructs.

### Design/Methodology

An initial study is presented in which data was collected from participants ( $n=122$ ) in simulated AC groups. Data includes the observation of expert assessors, intelligence and personality data collection, self-assessment/ external assessment and biographical information.

### Results

Factor analyses show that the separate assessment of cognitive and social performance has succeeded to an exceptionally high degree. Further analyses contain correlation studies on collected external criteria. Interobserver-reliability was evaluated using intraclass-correlations. Additional analysis covers the classification of the exercise in terms of objectivity, reliability, validity and acceptability, fairness, observation instructions, practicability, time and effort as well as participant reactions.

### Limitations

Limitations of the study due to the design lie in the examination of validity, particularly the exercise's predictive validity.

**Research/Practical Implications**

With this exercise we have an innovative approach to the measurement of aspects relevant to cognitive and cooperative capabilities.

**Originality/Value**

The results of the exercise are independent of the personality factor extraversion, which is contrary to the often one-sided orientation of previous AC exercises. The playful nature of the exercise makes it possible to observe highly authentic behavior.

**How valid is the individual assessment center in the selection of managers? Two studies on concurrent and prospective validity**

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**Purpose**

The Individual Assessment (IAC) is an instrument for the selection of applicants for managerial positions. Contrary to its sibling, the Assessment Center (AC), the IAC's validity has rarely been examined. In selection practice, however, the IAC is a method frequently used, especially for the selection for higher managerial positions.

**Design/Methodology**

The first study examines the prospective validity of the IAC with internal and external applicants (N=100) for managerial positions in an international automotive company; the IAC's result is being compared to career speed and actual superior's assessment (3-8 yrs. after the IAC). The second study examines the IAC's concurrent validity. N=40 managers from a German insurance company went through an IAC and concurrently had been assessed by superiors, co-workers, subordinates, and the candidates themselves.

**Results**

In study 1, the correlation between the IAC (mean across all criteria), career speed, and superior's evaluation had been calculated. In study 2 the intercorrelation between the IAC's results and the assessments by the other groups had been correlated. A regression as well as a Factor Analysis revealed the IAC's incremental validity over other assessment sources.

**Limitations**

Due to legislative and privacy restrictions several interesting data could not be collected.

**Research/Practical Implications**

The two studies show the prospective and the concurrent validity of the IAC - as well as its limitations.

**Originality/Value**

Contrary to the AC there are almost no studies examining the IAC's validity, especially with respect to the group where the IAC is widely applied in real life selection processes - managers within organizations.

## Posters

**Athletic activities as an indicator for social competencies in personnel selection?**

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The active pursuit of athletic activities is often viewed as an indicator for social competencies in today's practice of personnel selection (regarding job applications). So far there are no studies concerning this heuristic. An online-survey with a sample of 377 participants was conducted to investigate if athletic people and non-athletic people differ in their occurrence of social competencies.

Also, potential differences were explored between non-athletic people, people who participate in team sports versus individual sports and people who participate both in team sports and individual sports. 17 primary factors and 4 secondary factors of social competencies were examined. Furthermore, a possible connection between social competencies and the intensity of the athletic activity (days per week, number of competitions per year) was inspected. Results show that athletic people differ in no way from non-athletic people regarding their social competencies. The only significant distinctions between the groups (non-athletic, individual sports, team sports and both sports) are too small to withhold any practical relevance for personnel selection. Regarding the intensity of athletic activities, there are some very small positive (activities per week) as well as negative correlations (competitions per year). In conclusion, the author do not believe information about athletic activities in job applications to be a useful indicator for social competencies.

### **The role of the applicant nonverbal behavior in the job interview and job performance**

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#### **Purpose**

To infer important characteristics, such as applicant personality traits, recruiters often rely on the nonverbal behavior the applicant expresses during the job interview. Moreover, research has shown that the applicant's nonverbal behavior affects the hiring decision. What has not yet been shown is how applicant characteristics are visible in a job interview through nonverbal behavior and how this nonverbal behavior then affects the hiring

decision and how it is related to later job performance.

#### **Methodology**

We conducted a job interview with 60 applicants who also performed a subsequent job (similar to sales). To remedy the restriction of range problem, we hired all applicants, regardless of their job interview performance. Prior to the job interview, applicant Big-5 personality traits were measured. Job performance was assessed objectively.

#### **Results**

Applicants were more likely to be hired if they spoke more and faster, had less short utterances, less turns and less pitch variation during the job interview. However, only applicant's speaking time (ST) was related to hiring decision (positively) *and* job performance (negatively). Moreover, ST serves as an indicator for applicant neuroticism (negative) and extraversion and mediates (controlled for age and gender) the relation between neuroticism (extraversion, respectively) and hiring decision. No mediation of ST was found between neuroticism (extraversion, respectively) and job performance.

#### **Limitations**

Results can only be generalized on specific jobs such as sales.

#### **Implications/Originality**

The present study extends existing literature on the role of applicant nonverbal behavior in the realm of a job interview *and* job performance, including automatically extracted nonverbal cues and objectively measured job performance.

## **When skill misrepresentation backfires: Different reactions to majority and minority applicants**

### ***Nominated for the EAWOP Congress 2013 Best Poster Award***

Steve Binggeli (Univ. of Lausanne, CH) [binggeli.steve@gmail.com](mailto:binggeli.steve@gmail.com), Franciska Krings (Univ. of Lausanne, CH)

#### **Purpose**

Skill misrepresentation on résumé is a common impression management tactic used by applicants to increase their chances to be invited for a job interview. The aim of the present experiment is to examine the consequences of such misrepresentation for local and foreign applicants, when recruiters detect them in the interview.

The black-sheep effect postulates that ingroup members expressing undesirable behaviors are more harshly derogated than outgroup members. Thus, we expected local recruiters to evaluate local applicants more negatively than foreign applicants, but only when applicants misrepresented; i.e., exaggerate their skills.

#### **Methodology**

161 Swiss professionals experienced in conducting job interviews participated in our online experiment. The experiment followed a 2 (applicants' origin: Swiss, foreign) x 2 (language skill representation: accurate, exaggerated) between subject design. Participants evaluated the perceived person-job fit of applicants based on their résumé and their performance in a mock job interview.

#### **Results**

Supporting our hypothesis, results showed that when applicants presented their skills accurately, local and foreign applicants were evaluated similarly. However, when applicants exaggerated their skills, locals were evaluated more negatively.

#### **Limitations**

Our results are limited to misrepresentation of foreign language skills.

#### **Research/Practical Implications**

The black-sheep effect has several negative consequences. Even though it derogates ingroup members, it is a form of subtle discrimination, helping the ingroup to preserve its positive image. Also, it bears the risk that outgroup members get wrong signals, e.g., that misrepresenting skills is tolerated.

#### **Originality/Value**

This research highlights the negative consequences of skill misrepresentation as a subtle form of employment discrimination.

## **Case study: Diagnosis of managerial competences in administration. Seeking best solution of organization support in psychological test use for recruitment purposes**

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#### **Purpose**

After analysis of how the managerial competences are diagnosed in administration, we specified their quality in three areas: (1) the adequacy of the model used to measure competences in accordance to the organizational needs (both, the abilities and soft skills were measured), (2) good practices for the evaluation and selection procedures of employees in the organization, (3) the main problems in the diagnosis of managerial competences with the usage of psychological tools. Based on that data we built the questionnaire for the diagnosis of leadership styles along with the training program that allows consultants to develop good practices in test use.

#### **Design/Methodology**

The Adjective Test was developed to diagnosis leadership styles (standardization and normal-

ization on a sample of 204 adults). In addition, we developed the procedure for its application

#### Results

The psychometrical parameters of the tool are satisfactory: reliability for the scales form 0,64 to 0,80 (Cronbach's Alpha coefficient). Also content and criterion validity were checked and found as acceptable.

#### Limitations

Impact on the job satisfaction should be examined

#### Research/Practical Implications

Delivering the new tool supporting effective testing policy in the organization, we introduce new look at the market for consulting services, which is in accordance with standards for test use promoted by the EFPA (Euro-Test-WO).

#### Originality/Value

To our knowledge, on Polish tests' market there is not many tools for diagnosing leaderships skills in relational terms – both - form the organization and construct perspective. An important contribution is also to present a strategy for building dialog platform among all sides involved in test creation process.

### **Challenges in test adaptation: examining dependability in five diverse languages**

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#### Purpose

This paper discusses the adaptation of a personality-based dependability and safety instrument into five diverse languages: German, Simplified Chinese, Icelandic, Danish and Italian. It also illustrates the practical implications of differential item functioning (DIF) in a short, fixed instrument.

#### Design/Methodology

Following a thorough translation and reviewing process, for all five language versions data was collected with employees from nine organizations in total. Sample sizes varied between 118 and 355. Logistic regression was applied to each language sample to examine if items were performing similarly in the source and target languages.

#### Results

In each language version one to two items showed uniform DIF. Additional analyses indicated that the potential impact of DIF items on the overall score was limited.

#### Limitations

Sample sizes in this study varied. Also, the focal and reference samples were not perfectly matched in terms of age, gender, industry and job level were due to practical constraints.

#### Research/Practical Implications

Subject experts reviewed the items and suggested that DIF was not due to translation problems. Possible cultural differences could have contributed. Therefore, caution needs to be applied when comparing scores across languages language versions. If possible, language specific norms should be developed.

#### Originality/Value

Cultural differences between countries of these languages could result in candidates perceiving the items in different ways. To investigate this further, social desirability of the items will be rated by subject experts who are native speakers of the target languages. The link between DIF and culture-specific social desirability has not been examined in previous research.



### The moderating effect of job learning stage in the personality-performance relationship

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#### Purpose

The relatively small proportions of performance variance explained by personality factors have prompted researchers to investigate other potentially relevant variables. In this study, we posited that personality factors interact with job learning stage's dimensions to predict performance. We tested the moderating effects in a longitudinal design with 290 participants using regression analyses. Results supported interaction effects.

#### Design/Methodology

A longitudinal study design was used to test our hypotheses. A total of 290 students completed the NEO FFI and the authors' job learning stage scale. Data were collected three times during the academic semester. Midterm and final grades were used as measures of performance.

#### Results

Results revealed a significant interaction between Conscientiousness and Unfamiliarity with tasks ( $\beta = .112$ ,  $t(297) = 2.037$ ,  $p = .043$ ) and further revealed a significant interaction between Agreeableness and Need for skill acquisition ( $\beta = .168$ ,  $t(293) = 2.918$ ,  $p = .004$ ).

#### Limitations

Moderating effects need to be tested longitudinally with employees in a work setting.

#### Research/Practical Implications

The ability of personality factors to predict performance varies according to job learning stage. Thus, to make better personnel selection decisions, organizations should first determine which learning stage best characterizes the job as a whole, and then assess the

personality factors that are predictive of performance in the relevant job stage.

#### Originality/Value

The job learning stages scale is a measurement tool newly developed by the authors. As such, this is the first study to investigate interaction effects on job performance between the Big Five and job learning stage.

### Applicant test-taking attitude after rejection

Sonja Schinkel (Technical Univ. Eindhoven & Univ. of Amsterdam) [s.schinkel@tue.nl](mailto:s.schinkel@tue.nl), Annelies Van Vianen (Univ. of Amsterdam), Dirk Van Dierendonck (Erasmus Univ.), eil Anderson (Univ. of Amsterdam)

#### Purpose

Organizations increasingly use tests of aptitude and achievement to evaluate and select the best possible candidates from an applicant pool. Despite this widespread practice, its influence on attitudes toward test-taking of candidates who are rejected is highly under-researched. Building on the Selection Fairness Model by Gilliland, we hypothesized that perceived fairness, performance feedback, and attributional style would interactively influence rejected applicants' test-taking attitudes. We expected that feedback would negatively influence post-rejection attitudes, and that procedural fairness perceptions and attributional style would moderate this relationship. Design/Methodology To test these assumptions, we designed a between-subjects laboratory study. After taking two GMA-tests, undergraduate university students ( $N = 112$ ) randomly received one of three rejection messages (including no specific score/high score/low score).

#### Results

Regression (planned contrast) analyses supported our hypotheses: When specific feedback about performance was provided, procedural fairness positively affected post-rejection test-taking attitude, regardless of

attributional style. In contrast, when no specific feedback was given, 'optimistically attributing' individuals showed higher attitudes if they perceived the procedure as unfair.

#### Limitations

The generalizability of our results to actual selection situations remains to be tested.

#### Research/Practical Implications

These results imply that researchers and practitioners should strive to optimize the way in which people are informed of selection decisions after test-taking, for instance by providing better information about selection procedures.

#### Originality/Value

To our knowledge, our study is the first to analyze the combined effects of feedback, fairness and attributions on rejected applicants' test-taking attitudes.

### **Emotional intelligence in applicant selection for jobs involving emotional labor**

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#### Purpose

Although there is a growing amount of literature that demonstrates the importance of emotional intelligence (EI) for jobs involving emotional labor, research on EI as a criterion in applicant selection is relatively scarce. The present study was aimed at investigating the emotional abilities of people applying for high emotional labor jobs and the relation between these emotional abilities and the aptitude to pursue such an occupation.

#### Design/Methodology

In addition to the standard psychological aptitude test, 344 applicants to a German airline were given the MSCEIT (Steinmayr, Schütz, Hertel, & Schröder-Abé, 2011), a perfor-

mance-based EI measure. Applicants' aptitude to be a flight attendant was rated on the basis of their performance in a group exercise, an interview, and a role play.

#### Results

Results of a latent cluster analysis yielded four EI profiles: 1) above-average EI facet scores, especially in understanding emotions, 2) above-average EI facet scores, especially in perceiving emotions, 3) average EI facet scores, and 4) below-average EI facet scores. Applicants' total EI scores were positively related to their rated aptitude to be a flight attendant. Applicants with Profile 1 were considered to be particularly well-suited for the job, whereas applicants with Profile 4 were rated most negatively.

#### Limitations

Most notable is the relatively small variance in the observer ratings concerning applicant performance.

#### Research/Practical Implications

In the long run, the benefits may become even more evident, possibly with respect to the better psychological health of emotionally intelligent employees.

#### Originality/Value

The present study provides support for the relevance of applicants' EI in selection processes.

### **Evaluation of e-recruitment: The redesign of a career website**

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E-Recruiting is a fast moving and ever changing method for addressing potential employees online. The channels used in E-Recruiting – career websites being one example - therefore need to be evaluated and continuously optimized to meet and possibly exceed applicants'

expectations. This study presents the results of a pre-post evaluation of the redesign of a career website. The test material consisted of two versions of the career website of a global chemical-company. One version showed the old existent website while the second version was newly developed and redesigned to improve the addressing of applicants. A total of 191 subjects (aged 18–55) rated the websites using three main criteria as reference: content, usability and aesthetics. Additionally their intention of revisiting the the likelihood of their revisiting the websites was assessed. The results show a significant improvement in all three criteria as well as a higher probability to revisit the website of the new version. Further explorations of the relationship between the intention to revisit the website and content, usability and aesthetics indicate that content is the most important factor for revisiting a career-website followed by aesthetics. Usability only barely contributed to the intention of revisiting. Based on these results it could be shown that companies should concentrate particular on having an informative and up-to-date content on their career-websites. Besides this it could be demonstrated that regular evaluation of their e-recruiting measures can give companies valuable information, which should be used to keep up with the rapid pace of the innovativeness of the web.

### **Gender-fair language use in online job advertisements**

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#### **Purpose**

Gender-fair language use in job advertisements has been shown to impact the outcome of personnel selections. It is thus important to assess, to what extent gender-fair language is

used in job advertisements and with which factors it is associated, e.g., language, culture, status, and gender typicality of profession.

#### **Design/Methodology**

In the present research we investigated gender-fair language use in job advertisements published online in four European countries with different socio-economic rankings of gender equality (World Economic Forum, 2011), namely Austria (rank 34), Czech Republic (75), Poland (42), and Switzerland (10).

From four lines of business with different percentages of female employees – steels/metals, science, restaurants/food services, and health care –we randomly selected 100 job advertisements, summing up to 1600 job advertisements in total.

#### **Results**

A first analysis of the Swiss data indicates that the phrasing of job advertisements is closely related to a profession's gender typicality (e.g., merely masculine forms are used in steels and metals, gender-fair forms in healthcare). Feminine forms however are almost never used. Cross-cultural comparisons will be presented.

#### **Limitations**

We analyzed job advertisements of four specific lines of business in four European countries. To what extent results can be generalized remains an open question.

#### **Research/Practical Implications**

The present data provide a sound basis for future studies on gender-fair language use in job advertisements. Furthermore it sheds a light on how companies comply with national guidelines of gender equality.

#### **Originality/Value**

This is the first time that gender-fair language use in job advertisements is investigated (a) across different countries and languages and

(b) considering status and gender typicality of professions.

### **Validation of a mechanical aptitude test in the Psychological Service of the German Public Employment Service**

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*(Federal Employment Agency, DE)*

#### **Purpose**

To assess the aptitude of individuals for specific (e.g., mechanical) jobs is an important part of the work in the Psychological Service (PS) of the German Federal Employment Agency (FEA). A new instrument (TMV; S&F Personalpsychologie, 2011) was evaluated with respect to construct validity.

Mechanical comprehension (MC) is a cognitive ability construct with relations to several other intelligence factors. In Carroll's (1993) three-stratum theory MC relates to three broad factors (broad visual perception, fluid and crystallized intelligence). Furthermore, specific interests are a predictor of mechanical comprehension (e.g., realistic and investigative interests) and men usually score higher than women. We hypothesized similar relations for the TMV.

#### **Design/Methodology**

The sample consists of  $N=753$  PS clients. Mainly, it had to be assessed if the clients will probably succeed in a vocational training for a mechanical job.

#### **Results**

Most hypotheses were supported. The highest correlations with the TMV could be found for a mental rotation and a figure reasoning test. Factor and regression analyses confirmed these results. With respect to interests, particularly investigative interests and interests for drawing blueprints or decorative arts were correlated with the TMV. Women had lower

scores than men although the effect was small.

#### **Limitations**

The women subsample was small ( $n=83$ ) so that results concerning gender effects might not be generalized.

#### **Research/Practical Implications**

The TMV is recommended for further use in the PS of the FEA if clients express interest in a mechanical job.

#### **Originality/Value**

The results indicate that the TMV is a construct-valid instrument for assessing mechanical aptitude.

### **Applying item response theory to job analysis data**

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#### **Purpose**

Item response theory (IRT) is increasingly being used in occupational assessment, offering many benefits in comparison to classical test theory techniques. However relatively little attention has been focused on identifying ways in which IRT can be applied to improve measurement in job analysis.

#### **Design/Methodology**

This study examined the performance of polytomous IRT models using personality-related job analysis data from a work-based personality questionnaire-the Dimensions (Talent Q, 2004). The Dimensions assessment is a 160-items measure. The assessment's 15-trait model of personality at work covers three broad personality domains: People and Relationships, Tasks and Projects, Drives and Emotions. Subject Matter Experts rated the importance of the 15 personality traits on 156 sales jobs across a range of industry sectors. After examining IRT model assumptions, the data were analysed using IRT.

### Results

Results supported the use of the polytomous IRT model in analysing job analysis data, which identified several areas for improving job analysis rating scale performance.

### Limitations

The use of a single job family (i.e. sales job) may have had limited generalizability. Further study using a variety of occupational groups would be helpful to test the findings.

### Research/Practical Implications

IRT's advantages in the areas of improved measurement precision and detection of questionable response anchors would seem to offer considerable promise in terms of improving job analysis measurement technology and practice.

### Originality/Value

Job analysis surveys typically involve rating scales (e.g. importance) with multiple response options. These data are usually analysed with descriptive statistics (e.g., mean, standard deviation, percentages). The study demonstrated that IRT offers insight into job analysis data.

## Construct equivalence and cultural proximity of personality profiles

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### Purpose

This study examines the construct equivalence of the Occupational Personality Questionnaire (OPQ32) and explores cultural proximity based on country personality profiles and country-level indices such as Hofstede's cultural dimensions.

### Design/Methodology

This study examines equivalence of OPQ32r language versions focusing on construct equivalence, across forty-one countries

(N=128354) by comparing correlation matrices across different samples using structural equation modelling (SEM) Equivalence is examined using UK English as the reference language and by exploring comparisons between all country samples. Cultural proximity is examined by applying a cluster analysis to country means scale scores as well as using fit indices retrieved from the SEM as proximity measures. Findings will be compared against Hofstede's cultural dimensions.

### Results

Using UK English as the reference language, the tested models showed excellent fit across countries, with the CFI ranging from 0.982 to 0.999 and the RMSEA from 0.006 to 0.030. Comparisons between all samples showed similar results. The results strongly confirm the construct (i.e. configural) equivalence of OPQ32r language versions. The cluster analysis using country mean scale scores identified eight clusters. Overall the clusters made sense from historical and cultural perspectives. Applying a cluster analysis to the SEM fit indices also resulted in interpretable structures.

### Limitations

A small number of regions had limited sample sizes.

### Research/Practical Implications

The research contributes to our understanding of the influence of culture in personality assessment.

### Originality/Value

This study uses country means and similarity in construct relationships to gain insight into cultural clusters and links the results to established theories (e.g. Hofstede).

### **Demographically based selection methods at university: The support of international and local students for different justice rules**

Steve Binggeli (Univ. of Lausanne, CH) [steve.binggeli@unil.ch](mailto:steve.binggeli@unil.ch), Grégoire Bollmann (Univ. of Lausanne, CH), Leila Belhadj Ali (Univ. of Lausanne, CH)

#### **Purpose**

Building on the instrumental model of group conflict (Esses, Jackson, & Armstrong, 1998), we examine the support of local and international students for demographically based selection criteria involving different justice rules (Deutsch, 1955; Fiske, 1991). We postulate that students will support more strongly selection criteria that increase the competitiveness of their national group, that is their likelihood to be enrolled at university.

#### **Design/Methodology**

Participants were 110 local and 66 international students. After having read a scenario suggesting that the establishment of quota would contribute to resolve overpopulation problems in their master program, participants indicated their support for a selection method to reach this quota that either involved an equity, equality (50% internationals, 50% locals), need or unfair (priority to locals) rule.

#### **Results**

Results show that the need rule was more supported than the equity and unfair rules. In addition, international students supported both the equality and the need rules more strongly than the unfair rule, whereas local students supported the unfair rules more than international ones. Taken together, these results supported our hypothesis.

#### **Limitations**

The selection criteria referred explicitly to students' national origin, but did not consider grades.

#### **Research/Practical Implications**

This research reveals forms of ingroup biases in the preference of students for selection procedures at university. Results suggest that taking students' individual needs into account, as criteria for their enrollment, would reduce these biases.

#### **Originality/Value**

While many universities seek to limit their number of students, this research demonstrates the importance of considering justice rules in selection methods.

### **Development of a job knowledge based assessment and training platform for the nursing sector**

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#### **Purpose:**

The EU funded Adaptive Medical Profession Assessor (MED-ASSESS) project aims to facilitate employee selection and training needs analysis through detailed assessment of that job-knowledge required for successful performance in specific jobs in healthcare support.

#### **Design/Methodology**

To identify the job knowledge requirements of nursing jobs, a two stage procedure was followed. First, skill requirements for preselected jobs were deductively derived from existing taxonomies. A comprehensive list of knowledge domains was distilled from these secondary sources and expanded based on interviews with job incumbents and SME's from healthcare practice and education.

#### **Results**

Applicants/employees complete an adaptive knowledge test that culminates in a comprehensive knowledge profile and an individually tailored training needs analysis. This presentation covers i) the process by which the set of



knowledge domains was determined, ii) how the system combines knowledge domain and GMA scores to produce an applicant's job knowledge portfolio, and iii) a description and live demonstration of MED-ASSESS.

#### Limitations

A challenge underlying job knowledge testing is that content is highly idiosyncratic to specific jobs, although within job families content may generalize. Whatever the case may be, each job must be analyzed in detail for its job knowledge to be elucidated, although the laboriousness of this endeavor is increasingly being facilitated by technology.

#### Research/practical implications

Practice stands to benefit through enhanced person job (demands-abilities) fit, and the identification of individual training needs.

#### Originality/Value

Job knowledge is often named as the prime mediator in the relationship between GMA and job performance, yet seldom empirically researched.

### **Recruiting for retention: Incremental validity of person-organization fit above personality in predicting retention-related variables**

*Rein De Cooman (KU Leuven, BE)*  
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#### Purpose

A high-quality selection procedure enables an organization to make an accurate prediction of job performance. However, nowadays organizations' interests go beyond predicting task performance with an increased attention for retention-related concepts. An organization that continuously hires while losing talent internally will not survive. Recruitment and selection based on person-organization fit is suggested as a promising method (e.g. McCulloch & Turban, 2007). The basic notion here is that fit between personal and organizational

attributes contributes to important individual and organizational outcomes, such as performance, satisfaction, commitment, and retention (Kristof-Brown, Zimmerman & Johnson, 2005; Verquer, Beehr & Wagner; 2003).

#### Design/Methodology

In a multiple-wave study we examined the incremental validity of a person-organization fit measure beyond a personality measure for predicting intention to stay, job satisfaction, and organizational commitment. We questioned a group of 120 employees during the selection and six months after entering their jobs. Using Lyons Work Values Scale, personal values were compared to organizational values in order to calculate the level of actual fit which was later on linked to outcome variables.

#### Results

Preliminary results support the incremental validity hypothesis for all outcome variables.

#### Research/Practical Implications

From a war for talent perspective retention becomes a crucial objective of personnel selection. Because of the positive relation between actual PO fit and intention to stay, job satisfaction, and organizational commitment, our findings specify that person-organization fit should be considered when selection employees.

### **Sense of coherence and organisational commitment in the enterprise resource and planning industry**

*Rian Viviers (Unisa, ZA)* [vivieam@unisa.ac.za](mailto:vivieam@unisa.ac.za), *Heinz Aust (Unisa, ZA)*, *Llewellyn Van Zyl (Unisa, ZA)*

Situational judgment tests (SJTs) are testing methods often used in Personnel Selection to appraise different constructs (Whetzel & McDaniel, 2009). In the framework of an overall career progression program in a Public Administration, SJTs were developed to assess several competencies relevant to both task

(e.g. planning, managing, etc.) and contextual performance (e.g. helping behaviour, organizational loyalty, etc.). Each competency is a combination of KSAOs needed to perform efficiently in a specific context (Campion & al., 2012; Le Boterf 2008).

Given the lack of internal consistency of SJT and the dichotomous nature of the data, we decide to use Multidimensional Item Response Theory (MIRT) model to examine the issue of construct validity. Based on Hartig & Höhler (2009), we use MIRT compensatory model to estimate the latent covariance structures of the SJT. Different model are tested and compared depending on the number of dimension involved, the nature of the items and latent variables relation (between or within-item multidimensionality) and the number of model parameter (one or two parameter model).

The results and findings lead us to discuss some implications (gaining accuracy, modeling performance in complex task, etc.) and limitations (dealing with complex loading structure, etc.) of using IRT, over and above classical test theory, in the specific case of SJTs applicants performance. The originality of this communication also lies in the way we addressed SJTs reliability and construct validity issues with a measurement based model that differs from the one usually used in the field.

### **The contribution of multidimensional IRT for modeling applicants performance on a SJT**

*Benoit Lothe (Univ. of Liège, BE) [Benoit.Lothe@ulg.ac.be](mailto:Benoit.Lothe@ulg.ac.be), Christian Monseur (Univ. of Liège, BE), Isabelle Hansez (Univ. of Liège, BE)*

Situational judgment tests (SJTs) are testing methods often used in Personnel Selection to appraise different constructs (Whetzel & McDaniel, 2009). In the framework of an overall career progression program in a Public Administration, SJTs were developed to assess

several competencies relevant to both task (e.g. planning, managing, etc.) and contextual performance (e.g. helping behaviour, organizational loyalty, etc.). Each competency is a combination of KSAOs needed to perform efficiently in a specific context (Campion & al., 2012; Le Boterf 2008).

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### **Development and validation of a research instrument for measuring young job seekers' preferences for job and organizational characteristics**

*Stephan Corporaal (Open Univ., NL) [corporaal@me.com](mailto:corporaal@me.com)*

#### **Purpose / State of the Art**

The purpose of this study is to develop and validate an instrument to measure young job seekers' preferences for job and organizational characteristics related to job and organiza-

tional attractiveness. Recruitment research identifies which characteristics are related to job and organizational attractiveness, but there is a lack of agreement about how to measure and operationalize these characteristics for young, non-college graduates with limited or no work experience. We developed such an instrument for three job and organizational characteristics: type of work, work environment and organizational image.

#### Design/methodology/approach

We used the outcomes of a qualitative study under 433 undergraduate students in the Netherlands to operationalize the job and organizational characteristics and generate items. After constructing the instrument, we gathered data from a sample of 1659 undergraduate students to test it. We assessed the reliability of the scales using Cronbach's Alpha and performed an explorative and confirmatory factor analysis.

#### Findings

Our study reveals that young job seekers associate job and organizational characteristics with different aspects than are measured with existing scales commonly used in this line of research (mainly job design scales of e.g. Hackman & Oldham, 1967). Furthermore, young job seekers appear to use another language to express their preferences for these job and organizational characteristics. We developed an instrument that adequately captures their specific preferences for job and organizational characteristics in a language that is understandable for both lower and higher educated young job seekers and that connects well to how they perceive these characteristics

#### Research limitations/implications

We contribute with this paper to the discussion about how to operationalize and measure young job seekers' preferences for job and organizational characteristics. In the next few months we are refining and purifying the in-

strument and perform extra tests to validate the factor structure and access the convergent and discriminant validity of the scales. Furthermore, we ask employees and employers to evaluate the job and organizational characteristics with the same items as in the measurement instrument of young job seekers. By comparing young job seekers' preferences for job and organizational characteristics with employees' and employers' evaluations of these characteristics we can determine which type of jobs and organizations are attractive for young job seekers.

#### New Perspective/Contribution and Conclusion and Implications for Research/Practice

Our study reveals that young job seekers associate job and organizational characteristics with different aspects than are described in existing scales in job design research (e.g. Hackman & Oldham, 1967). Furthermore, young job seekers use another language to express their preferences for these job and organizational characteristics. We developed an instrument that adequately capture their specific preferences for job and characteristics in language that is understandable for lower and higher educated job seekers. By comparing these preferences with the job and organizational characteristics of a wide of array of companies, we can describe which type of jobs and organizations are attractive for these job seekers.

#### **Activation of the "what is beautiful is good" stereotyping during the selection process: What is the role of the recruiter's own characteristics?**

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#### Purpose

Studies have demonstrated a positive effect of physical attractiveness on hiring decision (Hosoda, Stone-Romero, Coats, 2003). Still, they

have overlooked such differences as recruiter's characteristics. A recruiter's own attributes could shape his/her perception of an applicant and force or buffer an activation of the stereotype "what is beautiful is good". Therefore, the presentation will review existing literature in order to answer the question: could individual differences (such as personal characteristics and beliefs) of recruiter influence physical attractiveness impact on hiring decision and how?

#### Design/Methodology

Literature review focuses on papers published from 2002 till 2012. A literature search is undertaken in PsichINFO database using the terms "physical attractiveness", "personality", "prejudice", and "hiring".

#### Results

Studies show that, for instance, lower agreeableness level predicts prejudiced evaluations, i.e. negative feelings towards a particular social group or a person who is perceived to be a member of a group (Ekehammar & Akrami, 2007). Consequently, recruiter's propensity to discriminate others could be specifically important for the perception process and for making decisions about an applicant's suitability for the job.

#### Limitations

Experimental studies are needed to investigate the interaction of recruiters' characteristics with the job applicant's characteristics.

#### Research/Practical Implications

The highlighted points will help to create directions for future studies as well as recommendations for practitioners. In particular, we will discuss what steps organizations can take to optimise the selection process.

#### Originality/Value

This is the first review of how the personal characteristics of a recruiter explain physical attractiveness bias during the selection process.

### **Potential of young candidates at the Belgian Defense: competencies or talent management?**

*Françoise Bertrand (Belgian Defense, BE) [francoise.bertrand@ulg.ac.be](mailto:francoise.bertrand@ulg.ac.be), Veerle Tibax (Belgian Defense, BE), Isabelle Hansez (Univ. of Liège, BE)*

#### Purpose

Nowadays organizations focus on talent as a competitive advantage for achieving business success (Berry, 2007). There is, however, little agreement on the definition of talent. Moreover no research has been conducted about the differences between potential of employees and their past performance or current skills. The aim of this study is to answer two questions: A) As talent management is often used to identify high potentials in executives, can we further expect that assessing potential of employees involved in basic functions is also useful to detect future talents? B) Will motivational characteristics determine the potential development of employees?

#### Design/Methodology

A qualitative analysis (focus-groups with critical incident technique including 100 employees) was conducted, followed by a quantitative study with questionnaire (more than 500 respondents) to consolidate the results. Participants were compared according to their career stage: function-specific training stage and early experience in exercising their function after training.

Results indicate that high potential in basic functions will develop throughout different stages in the career. Motivational characteristics of employees also stimulate their potential development.

#### Limitations

This research was conducted in a specific sector and should be replicated.

#### Research/Practical Implications

This research underlines which criterion and corresponding techniques should be estimated and used in selection: potential talent or actual competencies? Best practices to make predictions about the future potential of employees are identified.

#### Originality/Value

This research allows to consider talent in a different way from high potential identification and to combine theoretical perspectives with practical implications.

### **“I hereby apply for ...” – Construct and criterion-related validity of formal errors in traditional letters of application**

*Stefan Höft (Univ. of Applied Labour Studies (HdBA), DE) [stefan.hoeft@hdba.de](mailto:stefan.hoeft@hdba.de), Miriam Hacker (Univ. of Applied Labour Studies (HdBA), DE), Gerda Schuster (Univ. of Applied Labour Studies (HdBA), DE)*

#### Purpose

Letters of Application establish the first contact between job candidates and organizations. Most organizations use aptitude-oriented content analyses to decide about further steps (e.g. invitation to a job interview vs. rejection).

Company surveys show that a relevant part of the criteria used for “select out”-decisions is based on negative formal aspects, e.g. wrong wordings, missing information, incorrect labeling etc.

The study investigates the construct and criterion-related validity of these formal errors in relation to known personality traits and different (academic) performance criteria.

#### Design/Methodology

The analyses are based on a sample of N=340 letters of application created by later students of the HdBA. The content analysis concentrates on formal errors shown in cover letter and CV. Results are compared with different trait measures (GMA, Big5, RIASEC), school

grades, and several academic performance criteria.

#### Results

Males and younger tend to submit flawed applications. Small interlinks exist with school grades. No substantial correlations showed up between formal criteria and psychological constructs as well as academic performance and satisfaction criteria.

#### Limitations

The analyses are based on data produced by young students in the field of academic performance. The generalizability of the results for other applicant samples has to be tested.

#### Research/Practical Implications

These results imply that formal errors in letters of application are not related to (academic) performance. The application of these criteria potentially discriminates relevant subgroups (males, younger applicants) and increases the rate of false negative decisions.

#### Originality/Value

To our knowledge, the study is the first to systematically analyze the validity of formal errors in letters of application for different relevant criteria.





# 6. Human resource management

## Invited Symposia

### Women at the Top: New Insights and Controversies from Europe

#### *SIOP-IAAP-EAWOP Alliance Symposium*

Session Chair: *Rosalind H Searle (Coventry Univ.)*  
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Facilitator: *Deanne Den Hartog (Amsterdam Business School)* [D.N.denHartog@uva.nl](mailto:D.N.denHartog@uva.nl)

In the 1970s the Wall Street Journal coined the term 'glass ceiling' positioning the problem of the inequity of women's progression through organizations as a blockage at the top of the organization. Recent academic and the media attention show clearly that this is a more pernicious issue at all levels. As Europe has pioneered attention, and now formal legislation, aimed at redressing the balance at the top of organizations, this symposium is designed as part of a series of Alliances of psychology events offering provocative insight into how to achieve gender equality at the top of organizations. Here we focus on research from Europe with a symposium offering three distinct presentations that throw fresh insight into why women are neither contributing fully, nor being rewarded adequately in organizations. Each offers research led evidence supporting their positions and challenges psychologists to consider their part in perpetuating the current state of inequity. The first two presentations compare and contrast two dif-

ferent approaches being adopted in two distinct parts of Europe to board composition: The UK and Norway. The final presentation takes a new look at performance related pay and reveals why such types of reward management fail to deliver, but more importantly this approach may inherently favour one gender and simply exacerbate underlying inequity. In this symposium is organised with 20 minutes allocated to individual papers including questions, discussant comments for 15 min and then general audience participation and questions led by the chair for 15 minutes.

#### *Presentations of the Symposium*

#### **Women on FTSE 100 corporate boards – Progression and position to date**

*Susan Vinnicombe (Cranfield Univ.)*  
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##### State of the Art

There is a global debate on how to increase the number of women on corporate boards. This debate is led by the EU, where Viviane Reding has put forward 40% quota legislation for women in non-executive positions on corporate boards.

##### New perspectives

The presentation looked at the UK approach which is being led by Lord Davies and his Steering Committee (of which the presenter is a member). The 2011 report takes a multiple stakeholder approach and appeals to Chairmen, CEOs, investors, executive search firms, The Financial Reporting Committee and the media to increase the number of women on boards. In the past eighteen months since the publication of the Davies Report the percentage of women on FTSE 100 boards has increased from 12.5% to 17.2% and there are now only 8 all male boards. The pace of appointment has doubled with 25% of new appointments going to women now. Interesting-

ly 62% of the new female appointees have not had previous FTSE 350 board experience.

#### Research

A study was commissioned by the Equality and Human Rights Commission to investigate the impact of the Voluntary Search Code developed by a number of executive search firms in July 2011. The study involved personal interviews with ten leading signatories to the code. The focus of the study was to identify good practices. The interviews were recorded, transcribed and analysed using Nvivo.

#### Originality

The study was the first empirical attempt to measure what leading executive search firms are doing to improve women's position on boards.

### **Golden skirts and gold sack: Changes in board composition following the Norwegian gender quota law**

Morten Huse (Univ. of Witten DE & Norwegian Business School) [morten.huse@bi.no](mailto:morten.huse@bi.no)

#### State of the art

EU commissioner Viviane Redding has warned businesses and governments in Europe that if the number of women on boards do not increase significantly, a EU proposal will be passed requiring gender balance on corporate boards. In Norway many voluntary actions took place during the 1990s, but only with insignificant results on the number of women. In fact nothing happened till a law requiring gender balance was introduced. The objective of gender balance in the boards was reached in 2008.

#### New perspectives/contributions

In Norway were three categories of women that got into boards; owners, top executives and professional board members. It was the professionals making a living of being board members ("the golden skirts") that became

the multiboard members, and they replaced the "old boys' network". However, the "golden skirts" did not have the same characteristics as the "old boys' network". The women hardly knew each other. In 2010 the men continuing to be multiboard members were the investors ("the gold sacks") and not professional board members or members of the "old boys network". Four types of "the golden skirts" were observed; the analysts, the controllers, the decision-makers, and the value creators. Attributes of these four types were presented. As the women got more boardroom experience they tended to move to the group of the value-creators.

#### Research/practical implications

The findings and the presentation represent and input to the growing debate in various countries about legal regulations to increase the number of women on boards.

### **Symposia**

## **Multidimensional Approaches in Ageing Research: Application of Different Methods**

Session Chair: Jürgen Deller (Leuphana Univ. of Lüneburg) [deller@uni.leuphana.de](mailto:deller@uni.leuphana.de)

Facilitator: Franco Fraccaroli (Univ. of Trento, IT) [Franco.Fraccaroli@unitn.it](mailto:Franco.Fraccaroli@unitn.it)

#### State of the Art

In times of demographic change, it is important for organizations to develop a comprehensive age-friendly work culture reflecting a life-span perspective. This includes offering programs tailored to the individual situation. To date, human resource management and leadership are often falling short of addressing this issue, also due to a lack of easily available research-based information. This includes both, *micro* (or individual) and *meso*

(or organisational) levels. Therefore, researchers strive to better understand individual and organisational facets as well as the transfer of results to organisations. The papers in this international symposium address this field in three methodological perspectives.

#### New Perspective/Contribution

The first paper uses the representative 3<sup>rd</sup> wave of German Age Survey (DEAS) to investigate employment among elderly people between 55 to 70 years (N=8200). Variables include health factors, quality of life, subjective well-being, attitudes, norms, values and images of ageing people. This is followed by two papers reporting research with individuals in organizations addressing two groups with low supply in the labour market: engineers (N=197), and nurses (N=611). The final paper adds a third perspective by using yet another method, immersion in controlled experimental settings. Overall, multi-dimensional approaches including socioeconomic, health and psychological variables address a holistic perspective of employment across the work life-span.

#### Conclusion and Implications for Research/Practice

We point to three aspects: First, the symposium presents methodological perspectives relevant to age research. Second, papers present important individual and context information for practical implication. Third, the symposium stretches the relevant age groups to 70.

### ***Presentations of the Symposium***

#### **Employment among elderly people - Strategies and barriers**

Ulrike Fasbender (Leuphana Univ. of Lüneburg, DE) [fasbender@leuphana.de](mailto:fasbender@leuphana.de), Jürgen Deller (Leuphana Univ. of Lüneburg, DE)

#### Purpose

We present a statistical analysis of the German Age Survey (DEAS) to investigate employment among elderly people between 55 to 70 years. Next to socioeconomic variables and health factors, psychological predictor variables were quality of life, subjective well-being, attitudes, norms, values and images of ageing people.

#### Design/Methodology

Original data from the 3<sup>rd</sup> wave of the DEAS (N = 8.200) were collected via computer assisted personal interviews. We applied a hierarchical regression analysis to identify relations between the different predictors and the employment participation among elderly people. Structural equation modeling was used to combine measurement and structural part of the analysis towards a united model.

#### Results

The study results investigated influencing factors of employment of elderly people. Results indicated whether (and which) psychological variables are able to predict employment of elderly people above socioeconomic variables and health factors. Differentiated conclusions of employment after retirement are drawn. Strategies and barriers for elderly people are discussed.

#### Limitations

The sample is drawn from the German population and therefore cannot be generalized above the country's borders.

#### Research/Practical Implications

Cross-national research is needed to identify interaction effects between factors on the individual and societal level. Practically, the abolishment of age barriers supported by political regulations is discussed.

#### Originality/Value

The relevance of this study is set by challenges on the labor market due the demographic

changes of 21st century. The multi-dimensional approach including socio-economic, health and psychological variables addresses a holistic perspective of elderly people's employment.

### **Social cognitive post-retirement career planning**

Anne Wöhrmann (Leuphana Univ. of Lüneburg, DE) [woehrmann@leuphana.de](mailto:woehrmann@leuphana.de), Jürgen Deller (Leuphana Univ. of Lüneburg, DE)

#### **Purpose**

Many retirees decide to engage in some kind of work-related activity in their original career field. However, little is known about the planning process of post-retirement career activity. The aim of the present study was to apply mechanisms and variables of social cognitive career theory (SCCT; Lent, Brown, & Hackett, 1994) to post-retirement career planning.

#### **Design/Methodology**

197 employees of a German aerospace company aged 50 to 65 years completed an online survey.

#### **Results**

Results suggest that cognitive variables as well as social support constitute important factors in post-retirement career planning. The hypothesized model fits the data well ( $\chi^2(2) = 1.55$ ,  $p = 0.46$ ; RMSEA = 0.000; CFI = 1.00; SRMR=.018). Outcome expectations and job interest have direct effects on the intention to continue working in retirement which in turn has a direct effect on the level of planning activity regarding post-retirement work. Furthermore, expected social support has direct effects on planning activity, intention, and outcome expectations.

#### **Limitations**

The study has some limitations due to its cross-sectional design, the relatively small sample and the use of self-developed scales.

### **Research/Practical Implications**

The results of the study provide an insight to the correlates of career planning for retirement. Interventions designed to strengthen outcome expectations as well as expected social support could support older workers in their post-retirement career planning.

#### **Originality/Value**

To our knowledge, the study is the first to investigate the role of social support for the engagement in post-retirement work activities in the framework of social cognitive post-retirement career planning.

### **Put successful aging into context: How working conditions and team diversity affect selection, optimization, and compensation in nursing**

Andreas Müller (Heinrich Heine Univ. Düsseldorf) [Andreas.Mueller@uni-duesseldorf.de](mailto:Andreas.Mueller@uni-duesseldorf.de), Matthias Weigl (Univ. of Munich), Barbara Heiden (Univ. of Munich), Jürgen Glaser (Univ. of Innsbruck), Peter Angerer (Heinrich Heine Univ. Düsseldorf)

#### **Purpose**

We investigated successful ageing strategies in terms of selection, optimization, and compensation (SOC, Baltes & Baltes, 1990) in the context of nursing. Main research questions were: 1) Does SOC in nursing help to maintain the work-ability of older nurses and of nurses with musculoskeletal impairments? 2) Can working conditions support the application and effectiveness of SOC in nursing? 3) Are there team effects of SOC in nursing?

#### **Design/Methodology**

Our cross-sectional multi-method design used employee self reports, medical examinations, and supervisor ratings. Altogether 611 nurses working in 65 teams participated (age range 21- 63 years).

#### **Results**

Moderated multiple regressions show that SOC helps to maintain the work-ability of old-

er nurses and of nurses with musculoskeletal impairments. Job control substantially enhances the effectiveness of SOC. Multilevel analyses indicate that the diversity of SOC use in teams may inhibit the effects of team members individual SOC.

#### Limitations

The generalizability of our results is restricted as we used a convenience sample. Because of the cross-sectional design age effects may be biased by cohort differences.

#### Research/Practical Implications

Interventions to support healthy aging of nurses may refer to the SOC model. They should not only focus on the individual employee but also consider its working conditions and team characteristics.

#### Originality/Value

Our results extend existing findings on SOC at work by the perspectives of work design and teams.

### **Is it realistic to beam me up old Scotty?: Examining age differences in the face validity of an immersive controlled virtual office**

Annet H. de Lange (Radboud Univ. Nijmegen) [a.delange@psych.ru.nl](mailto:a.delange@psych.ru.nl), Inge Kersbergen (Radboud Univ. Nijmegen), Jorn T.G. Ackermans (Radboud Univ. Nijmegen), Suzan Kalmijn (Radboud Univ. Nijmegen), Beatrice I.J.M. Van der Heijden (Radboud Univ. Nijmegen)

#### Purpose

Research examining age differences in the workplace have mostly been based on survey field research. Limitations are the risk of common method variance, and not being able to make causal inferences. Moreover, the few controlled experimental settings are often based on relatively simplistic tasks. We aim to overcome these limitations by using a new immersive virtual office experiment.

#### Design/Methodology

The RIVERlab at Nijmegen ([www.riverlab.nl](http://www.riverlab.nl)) is one of the first high-end IVET (Immersive Virtual Environment Technology) labs in Europe for behavioural science research. In the new virtual office we have simulated office work components. Unlike “real life”, IVET environments are subject to perfect experimental control.

#### Results

To test the face validity of the virtual office tasks, N=46 respondents participated. An example item to measure how realistic the virtual office was: “To what degree does the situation created in the virtual office represent the real world?” The reliability of these items was sufficient (Cronbach’s  $\alpha = .67$ ). A univariate ANOVA revealed no significant age differences. Participants younger than 40 years ( $M = 4.8$ ,  $sd = .62$ ) perceived the virtual office as equally “realistic” compared to participants aged 40 years and older ( $M = 4.5$ ,  $sd = .72$ ).

#### Research/Practical Implications

We will discuss research and practical implications of the results found, especially the value of immersion technology.

#### Originality/Value

We will highlight some possible new ideas for future research of this original and highly valuable controlled experimental setting.

## **Coaching: Insights, Tools and Results**

Session Chair: Simone Kauffeld (Technische Univ. Braunschweig, Institute of Psychology) [s.kauffeld@tu-bs.de](mailto:s.kauffeld@tu-bs.de)

#### State of the Art

Coaching has grown from a novel intervention to an established developmental activity (Peltier, 2010; Grant, Passmore, Cavanagh, Parker, 2010). Coaching is defined as a cooperative process, in which the coach helps his cli-

ent/coachee to maximize his performance and well-being by developing his skills and personality (Evers, Brouwers & Tomic, 2006; Grant, 2009). Only since the 1990s empiric research on coaching has been emerged (Grant & Cavanagh 2004; Greif 2008) and therefore “the coaching field is still in its infancy and the research agenda is vast” (Grant et. al. 2010).

#### New Perspective/Contribution

The contributions of this symposium unite empirical research and theoretical considerations. At first, Greif presents a holistic concept of stress management-coaching using tools for pc, cloud systems and apps that support coachee and coach, without sacrificing personal interaction. Second, Gessnitzer et. al. contribute to the professionalization of coaching by constructing a valid coaching-instrument, measuring three relevant dimensions regarding human behavior: values, motives and skills. Focusing on the evaluation of established coaching-concepts, Braumandl et. al. identify three factors influencing the success of career-coaching: coach-client-fit, coaching-structure and -process. Based on 33 semi-structured interviews, Bickerich and Michel explore the content of change-related coaching. Finally, Ianiro and Kauffeld analyze the interpersonal dynamics between coach and client using videotaped behavioral data of 33 coach-client dyads.

#### Conclusion and Implications for Research/Practice

This symposium shows coaching from an academic point of view. It highlights tools and the interaction process between coach and client. It strives for a closer exchange of knowledge between researchers and practitioners in the field of coaching.

### ***Presentations of the Symposium***

#### **Stress management-coaching with bio-feedback**

*Siegfried Greif (Univ. of Osnabrueck and IwFB)*  
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##### State of the Art

The presentation shortly reviews the state of the art of Bio- and Neurofeedback research and practice. The techniques have been used since the 1960s in combination with behavior therapy. Evidence of their value for improving health and performance is extensive.

##### New Perspective/Contribution

Today we can observe the evolution of miniaturized and portable systems. We seem to be on the brink of a technological revolution, where everybody can privately buy and use biofeedback technologies. However, we believe that technology-fixated applications without personal support from e.g. a coach only have limited value. Therefore we have developed and tested a holistic concept of stress management coaching. It integrates knowledge from theory and research on stress at work and job design, detachment and unwinding from work, as well as cognitive-behavioral self-relaxation techniques with biofeedback.

##### Research/Practical Implications

Data from case studies show encouraging improvements. A technology development and research program is presented, using multimedia training and feedback tools for personal computers, cloud systems and apps that support the coachee and coach, without sacrificing personal interaction. To overcome the difficulties of coachees with a high level of stress to build up rigorous training routines and to transfer the self-relaxation into real-life stress situations, we use special telephone-shadowing techniques.

##### Originality/Value

The innovativeness of the concept relies on a combination of known methods and tools into



an integrated, science-based system. Its practical value is seen primarily a long-term improvement of psycho-social health.

### **Development of a valid coaching instrument: Measurement of differences between values, motives and skills (VaMoS)**

*Sina Gessnitzer (Technische Univ. Braunschweig, Institute of Psychology) [s.gessnitzer@tu-bs.de](mailto:s.gessnitzer@tu-bs.de), Eva-Maria Schulte (Technische Univ. Braunschweig, Institute of Psychology), Simone Kauffeld (Technische Univ. Braunschweig, Institute of Psychology)*

#### **Purpose**

Multiple questionnaires without strong empirical and theoretical foundation are used to analyze clients' personality, skills or goals (Wasylyshyn, 2003). The aim of this study is to develop a questionnaire to assess differences between three dimensions: affective values (what makes someone happy), motives (someone's goals) and skills (someone's strengths). Following positive coaching psychology, these three dimensions need to be considered when trying to unleash individual potential and enhance well-being (Linley, Woolston, & Biswas-Diener, 2009; Park, Peterson & Seligman, 2004).

#### **Design/Methodology**

Based on a literature review and following an interview with coaches 14 coaching-relevant scales were identified (e.g. power). For each scale items were phrased. Self-report data collected in the first study via online-questionnaire (n=351) was used for item reduction. Data from a second online-study was used to investigate the stability of the factor-structure (CFA). Furthermore, construct validity of the VaMoS was analyzed.

#### **Results**

In the first study, a questionnaire with 150 items was developed. In the second study, the factor structure of the VaMoS could be con-

firmed. Furthermore, initial evidence of the construct validity of the VaMoS is proved.

#### **Limitations**

Further studies need to continue validation and replicate factor structure of the VaMoS.

#### **Research/Practical Implications**

By developing a valid instrument, this study contributes to the current attempt to professionalize coaching.

#### **Originality/Value**

This study is the first attempt to construct a valid instrument for the use in coaching, measuring three relevant dimensions regarding human behavior: values, motives and skills. Differences between these dimensions should provide an indication of possible interventions.

### **Factors influencing successful career-coaching**

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#### **Purpose**

There is a need for research on coaching effectiveness and its predictors (Grant, Passmore, Cavanagh, Parker, 2010). The aim of this study is to identify factors influencing successful career-coaching. In particular the coach-client-fit, the coaching-structure and the coaching-process should be analyzed in terms of their effect on coaching success. Data stems from a career-coach training (Braumandl & Dirscherl, 2005), which is based on the behavior model by v. Rosenstiel and Comelli (2009) and the goal setting theory by Locke and Latam (2002).

**Design/Methodology**

Data was collected from 236 coaching processes, using a standardized questionnaire to evaluate aspects regarding the coaching-process and coaching-structure (ARTOP Check-the-Coach, Bachmann, Jansen & Mäthner, 2004). The coach-client-fit was calculated with the Business-focused Inventory of Personality (BIP) (Hossiep & Paschen, 2008). All coaches were graduate students of psychology with an average age of 23.7 years.

**Results**

Three possible predictors (coach-client-fit, structure and process) were tested regarding their influence on achieving the clients' goals. The factor "process" ( $R^2 = .12$ ) as well as the factor "structure" ( $R^2 = .11$ ), especially the sub-factor "frame conditions", had an impact on coaching success. The coach-client-fit had no influence on clients' goal achievement.

**Limitations**

$R^2 > .10$  was assumed relevant for each factor.

**Research/Practical Implications**

Coaching-structure and coaching-process can be considered as predictors for coaching success. Especially appropriate frame conditions turned out to be an important aspect and need to be recognized. By contrast, a high coach-client-fit is not required.

**Originality/Value**

This research is the first dealing with comparable career-coaching-processes based on a unique sample size.

**Lost in space? Coaching as a compass for executives during organizational change. A qualitative study**

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 Alexandra Michel (Heidelberg Univ.)

**Purpose**

Nowadays, leaders have to deal with different organizational changes which seem to be crucial for the success of organizations. Studies reveal that organizational change can have negative effects on recipients' reactions (Oreg, Vakola, & Armenakis, 2011). Thus, leaders' appropriate coping with change-related demands is likely to be challenging. Coaching may be one way to support leaders. Most studies evaluating coaching effectiveness provide positive results regarding the optimization of leadership competences and personality development (Grant, Passmore, Cavanagh, & Parker, 2010). Nevertheless, to the best of our knowledge there is a lack of research on effects of change-related coaching. Building on the Job Demands-Resources Model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), we assume that coaching considered as a job resource and organizational change as a job demand are associated with leaders' reactions in the change context.

**Design/Methodology**

To explore the content of change-related coaching, we conducted a qualitative study accomplishing 33 semi-structured interviews. The sample consisted of 18 coaches (3 females/15 males) and 15 executives (5 females/10 males). The data are analyzed using a qualitative content analysis.

**Results**

Both coaches and executives described similar goals of coaching and challenges on negative change-related affective appraisal. Whereas executives supported changes, coaches tend to view this commitment ambiguously due to negative effects on executives' health.

**Limitations**

It remains to evaluate these findings by longitudinal controlled study with quantitative methods.

**Research/Practical Implications**

Results highlight the need of special managerial abilities and coaching as a potentially helpful support.

**Originality/Value**

It is the first empirical work to analyze coaching especially in this field.

### **How interaction styles promote coaching success: A sequential analysis**

*Patrizia Ianiro (Technische Univ. Braunschweig, Institute of Psychology) [p.ianiro@tu-bs.de](mailto:p.ianiro@tu-bs.de), Simone Kauffeld (Technische Univ. Braunschweig, Institute of Psychology)*

**Purpose**

Research suggests that coaching is effective (e.g., Green, Oades, & Grant, 2005). However, little is known about the coaching process, specifically the coach-client interactions and their link to coaching success. This study investigates the role of the two interpersonal behavior dimensions affiliation and dominance for coach-client interactions and their outcome. We hypothesized that only dominant-friendly behavior of the coach triggers the client's dominance, which predicts the client's goal-attainment. Relations of trait affiliation/ dominance and interaction behavior during the first coaching session are explored.

**Design/ Methodology**

The verbal and nonverbal affiliation and dominance behavior of coach and client is analyzed with the Discussing-Coding-System (DCS, Schermuly & Scholl, 2011), using videotaped behavioral data. Interaction patterns of 11942 behavioral acts nested in 33 coach-client dyads are analyzed, using sequential analysis.

**Results**

Sequential Analysis conducted with Interact (Mangold, 2010) and regression analysis supported the hypotheses.

**Limitations**

Our sample does not represent the variety of professional coaches and clients in the field. It remains to be tested how much our results generalize to diverse coach- and client populations.

**Research/Practical Implications**

This work shows that addressing social psychological theories helps to explain interpersonal dynamics between coach and client. Independent of their approach, coaches may profit from these insights, suggesting how to interpersonally adapt to the client and to influence interaction outcome.

**Originality/Value**

To our knowledge, the study is the first to analyze systematically the interpersonal behavior of coach and client in real interactions, using a quantitative process-analytical approach.

## **Diversity Perspectives in Organizations**

*Session Chair: Astrid Podsiadlowski (Victoria Univ. of Wellington) [Astrid.Podsiadlowski@vuw.ac.nz](mailto:Astrid.Podsiadlowski@vuw.ac.nz)*

**State of the Art**

This symposium aims to fill the research gap on how organizations approach diversity and how to measure different diversity perspectives appropriately. The symposium presents essential results of the international EU-funded project "Inclusive identities in the context of increasing culturally diverse workplaces." identities in the context of increasing culturally diverse workplaces."

**New Perspective/Contribution**

This research project on workplace diversity pioneers a theory-driven research on the link between organizational and personal context factors to understand the reasons why (or why not) organisations manage diversity. Based on a literature review and several em-

irical studies we identified five diversity perspectives: *Reinforcing Homogeneity*, *Colour-Blind*, *Access*, *Fairness* and *Integration & Learning* and developed and validated the Diversity Perspective Questionnaire (DPQ) (presentation 1). The influence of managers' personal attributes on workforce diversity and organizational processes of diversity reveal deeper insights into the antecedents of diversity management in organizations (presentation 2). We also clarify the inconsistent results of diversity on innovation (presentation 3) and link them to majorities/minorities in organizations (presentation 4). Finally, we present (5) a model that highlights the importance of organizational strategies to manage cultural diversity pro-actively and also reveal deeper insights into the effects of colour-blindness in organizations.

#### Conclusion and Implications for Research/Practice

By the end of the symposium, we will provide a framework for the assessment and implementation of diversity management in organizations. As diversity management is complex, there is a need to consider different interdependencies. But our standardized measurement approach enables practitioners to analyze their diversity strategies and to rethink their approaches.

### ***Presentations of the Symposium***

#### **Overview about workplace diversity project and development of the DPQ**

Astrid Podsiadlowski (Victoria Univ. of Wellington) [Astrid.Podsiadlowski@vuw.ac.nz](mailto:Astrid.Podsiadlowski@vuw.ac.nz), Karen van der Zee (RijksUniv. Groningen), Daniela Groeschke (Univ. Jena), Marina Kogler (WirtschaftsUniv. Wien)

##### Purpose

An overview about the EU-funded research project on workplace diversity is given and Diversity Perspective Questionnaire is intro-

duced as one core measurement to link an organization's approach to antecedents and consequences of diversity and its management in organizations in different national contexts.

##### Design/Methodology

The development of the Diversity Perspective Questionnaire consists of two studies that are based on qualitative interviews (n=29) and surveys with employers and employees (n=148) in different Austrian organizations.

##### Results

In the qualitative employer data, all five perspectives could be identified with access being the most frequent approach to diversity. Survey results show that those five perspectives represent distinct ideologies with good to very good internal consistencies of the subscales revealing deeper insights into diversity management processes.

##### Limitations

Additional conceptual and empirical research is needed to validate the instrument and to test the effects of diversity perspectives in different contexts (e.g., national, branch, region).

##### Research/Practical Implications

The DPQ can be used as a tool to analyse the status quo of an organization's approach to diversity and its management as well as to identify a potential fit or mismatch between dominant of wished for strategies of an organizations.

##### Originality/Value

Together, the two studies support the need to extend the traditional diversity paradigm from three to five distinct ideologies. A new instrument was developed, the Diversity Perspective Questionnaire (DPQ), to measure an organization's approach towards diversity and linking them to desired outcomes such as per-

ceived benefits and costs and diversity management.

### **The importance of manager's personal attributes for workforce composition and diversity management**

*Astrid Podsiadlowski (Victoria Univ. of Wellington)  
Astrid.Podsiadlowski@vuw.ac.nz, Diana Boer (Univ. of Bremen)*

#### **Purpose**

This research investigates the influence of managers' personal attributes and organizational factors on workforce diversity, its management and performance evaluations. We developed a new cultural diversity index taking the relative proportion of ethnic and national groups and their group size into account.

#### **Design/Methodology**

We sampled top managers (N=141) in New Zealand who provided information about their organizations' workforce composition and personal information incl. attitudes and beliefs towards diversity. The components of managers' personal diversity approaches were identified in a preceding qualitative study with 18 top managers.

#### **Results**

Path-analysis results showed that (a) managers' personal approaches towards diversity had a positive effect on cultural diversity and its management, and (b) organizational factors such as profitability and internationality showed negative and positive effects on cultural diversity and diversity management. Furthermore, cultural diversity and diversity management affect performance assessment positively. Finally, our new diversity index provided valid results and outperformed the Blau Index by explaining more variance.

#### **Limitations**

This cross-sectional study does not allow for causal inferences and generalizations as only a

small sample of managers was tested using self-report survey.

#### **Research/Practical Implications**

We discuss the relevance of personality and attitudes of managers on diversity decisions. Our discussion derives possible implications for public and private organizations and their managers on effective diversity management.

#### **Originality/Value**

This research considered different contextual and personal factors utilizing mixed methods and integrating organizational and psychological theories to gain a comprehensive understanding of how diversity is approached and managed in New Zealand organizations.

### **Diversity and innovation – Do we need competencies or cultural diversity?**

*Daniela Groeschke (Univ. Jena)  
daniela.groeschke@uni-jena.de, Astrid Podsiadlowski (Victoria Univ. of Wellington), Menno Vos (RijksUniv. Groningen)*

#### **Purpose**

Empirical studies on the link between diversity and innovation are still scarce and reveal inconsistent results (Williams & O'Reilly, 1998; Ostergaard et al., 2011; Bonn et al., 2006; Kildruff et al., 2000). This study examines the effects of different diversity perspectives on organisational innovativeness. In line with diversity management research, *Integration & Learning* is assumed to have the highest impact.

#### **Design/Methodology**

A survey (n=392) was conducted in small, medium and large organisations in Austria. We assessed the DPQ, an innovation scale and different types of diversity initiatives.

#### **Results**

Organizations showing sensitivity regarding various diversity issues report higher innovation than organisations striving for reinforcing

homogeneity. Regression analysis revealed further that *Colour-Blindness* and *Fairness* have higher impacts on innovation than 'Integration and Learning'.

#### Limitations

The data are based on self-reports, which increases the probability of common method variance. A mixed method approach is needed to substantiate our results.

#### Research/Practical Implications

We can conclude that striving for homogeneity decreases the chances for organization to be innovative. The focus on differences – either on competencies (*Colour-blind*) or on cultural differences (*Fairness*) – seems to influence organizational behaviour regarding innovation.

#### Originality/Value

This study is the first study (we know) highlighting the need for differentiation of organizational strategies when analysing the link between innovation and diversity. Overall, both competence and diversity based approaches enhance innovation in organisations when they raise the awareness of the potential of diversity through participation and interaction.

### Colour-blind or colourful?

Menno Vos (RijksUniv. Groningen) [m.w.vos@rug.nl](mailto:m.w.vos@rug.nl), Wiebren Jansen (RijksUniv. Groningen), Astrid Podsiadlowski (Victoria Univ. of Wellington), Sabine Otten (RijksUniv. Groningen)

#### Purpose

Organizations differ in their perspective of how to approach diversity. In the present study we examined how organizations' *diversity perspectives* are related to affective and productive work outcomes among majority and minority employees in Dutch organizations. In addition, we aimed to unveil underlying processes that can explain this relationship. Specifically, we expected that feelings of

inclusion play an important role in understanding the diversity perspectives–outcome link.

#### Design/Methodology

We conducted a panel study among 150 native Dutch majority and 77 non-Western minority employees and used multi group SEM to test our hypotheses.

#### Results

A *Colour blind* perspective was more positively related to work outcomes for majority members than for minority members. In contrast, an *Integration & Learning* perspective was more positively related to work outcomes for minority members than for majority members. For both minority and majority members, feelings of inclusion mediated these relationships.

#### Limitations

All indicators were measured from a single source, which poses a risk of common method bias.

#### Research/Practical Implications

Inclusion seems an important factor for both majority and minority members to secure affective and productive work outcomes. However, how inclusion is reached appears to be different for majority and minority members and dependent on the diversity strategy the organization employs. We will discuss which implications this entails for diversity management in the light of creating opportunities for minorities but at the same time stimulating acceptance of diversity among majority members.

#### Originality/Value

This study contributes to the increasing appeal on gaining a deeper understanding in the underlying processes of the diversity – outcome link.



### **Difference in diversity perspectives: Exploration of the influence of contextual and individual factors**

*Marinus van Driel (Top Talent Solutions, US) [marinusvandriel@hotmail.com](mailto:marinusvandriel@hotmail.com), Daniela Groeschke (Univ. Jena), Astrid Podsiadlowski (Victoria Univ. of Wellington)*

#### **Purpose**

This study examines the relationship between perceived organizational diversity and workplace outcomes while also taking organizational and individual difference variables into account. Thus, we are able to gain deeper insights into the complexities of diversity management and the need to differentiate for strategies and practices in organizations.

#### **Design/Methodology**

We used our data set from the Netherlands and Austria (n=686) assessing the diversity perspectives, innovation, satisfaction, and self-efficacy.

#### **Results**

Results from moderated mediation analyses indicate that an organization's diversity perspective has different effects depending on individual differences and is influenced by perceived organizational diversity. The impact of aspirational diversity perspectives (Access, Fairness, Integration & Learning) on satisfaction and innovation is mediated by efficacy and applicable at all levels of perceived organisational diversity. On the contrary, colour-blindness is only effective for personnel with low levels of efficacy in highly diverse organizations.

#### **Limitation**

The results are limited to the European context, more specific to Austria and the Netherlands and limited to a single method survey.

#### **Implications**

Organizations must implement diversity perspectives that are congruent with their personnel's views about work. Personnel that are

not confident about their work ability may be threatened by diversity perspectives aimed at attaining access to new markets, fairness, and integration.

#### **Originality/Value**

This study contributes to diversity management research by using a novel analytic procedure to build on current conceptualizations of the functioning of diversity practices in organizations.

### **Understanding and Overcoming Obstacles to Women in Leadership**

*Session Chairs: Susanne Braun (Technische Univ. München) [s.braun@tum.de](mailto:s.braun@tum.de), Brooke Shaughnessy (Technische Univ. München) [brooke.shaughnessy@tum.de](mailto:brooke.shaughnessy@tum.de)*

#### **State of the Art**

Despite equal levels of skill and education, women remain underrepresented in management positions (Catalyst, 2011). Research to understand the obstacles that women face is of increasing relevance. Further, the fruits of this research yield scarce evidence-based strategies for improvement. The symposium is therefore concerned with ways to overcome identified obstacles and to cover various challenges organizational leaders face.

#### **New Perspective/Contribution**

First, Hentschel et al. analyze gender stereotypical wording in scholarship advertisements to demonstrate that female students respond more positively to female-typed advertisements than to male-typed ones. Second, Horvath and Sczesny show that alternative language forms in job advertisements for leadership positions reduce the perceived 'lack of fit' for women to leadership roles. Third, Viesel and Kark explore a 'gender paradox', namely that assessment centers are perceived as posing more difficulty to women than to men, leading raters to counter this dis-

advantage by rating women higher than men. Fourth, Mislin et al. show that women are more likely to use their mood as information to uniquely inform their trust decisions such that a happy mood results in greater trust. Fifth, Braun et al. integrate gender stereotypes and authentic leadership research to suggest that (a) only women attribute higher levels of authenticity to female as compared to male leaders and (b) higher levels of authenticity relate positively to perceptions of female leaders' femininity.

#### Conclusion and Implications for Research/Practice

This symposium provides evidence-based recommendations to better understand the particular organizational experiences of women with the aim of fostering their recruitment and education for leadership positions.

### ***Presentations of the Symposium***

#### **Determined or committed? Effects of gendered wording in scholarship advertisements on male and female students**

*Tanja Hentschel (Technische Univ. München) [tanja.hentschel@tum.de](mailto:tanja.hentschel@tum.de), Susanne Braun (Technische Univ. München), Claudia Peus (Technische Univ. München), Dieter Frey (Ludwig-Maximilians-Univ. München)*

##### Purpose

Scholarship foundations offer not only financial support, but educate students for future leadership roles. Earlier research has shown that women find job advertisements with more masculine-themed than feminine-themed words less appealing (Gaucher, Friesen, & Kay, 2011). Based on theoretical concepts of gender stereotypes (Eagly & Karau, 2002; Heilman, 1983) this research was designed to test the effects of stereotypically male and female wording in scholarship advertisement on student reactions.

##### Design/Methodology

In two experimental studies (Study 1: within-subjects design with participant gender (male, female) and wording (male-typed, female-typed); Study 2: between-subjects design with female participants and wording (male-typed, female-typed)) student reactions to scholarship advertisement were tested.

##### Results

In Study 1, female students rated female-typed advertisement as more appealing, interesting, had a stronger sense of belongingness to the scholarship foundation, and felt more likely to succeed in the application process. There were no differences in ratings of male students. Study 2 extended these findings to suggest that female students tended to apply more to female-typed advertisements.

##### Limitations

The results need to be replicated with field data and extended with regard to mediating mechanisms.

##### Research/Practical Implications

The conscious use of female-typed wording in scholarship advertisements can lead to greater gender diversity in scholarship applications, ultimately increasing the opportunities for women to be educated into leadership roles.

##### Originality/Value

Scholarships are often overlooked in current research on career development. To our best knowledge, this is the first study to demonstrate how gender stereotypical wording alters female students' responses to scholarship advertisements.

#### **Language as a barrier and facilitator for women's career progress**

*Lisa K. Horvath (Univ. Bern) [lisa.horvath@psy.unibe.ch](mailto:lisa.horvath@psy.unibe.ch), Sabine Sczesny (Univ. Bern)*

### Purpose

When applying for leadership positions or acting as leaders, women are still perceived with a 'lack of fit', thus hired less likely and evaluated less favorably than their male counterparts. In many languages, different language forms can be used to refer to both women and men: masculine forms (e.g., CEO in German: 'Geschäftsführer') and alternative forms (e.g., feminine-masculine word pairs, CEO in German 'Geschäftsführerin/Geschäftsführer'). We assumed that the use of masculine forms endorses the 'lack of fit' for women in leadership, whereas alternative forms reduce it.

### Design/Methodology

Two studies tested the hypotheses by manipulating language forms (masculine forms vs. alternative forms) and gender of the target to hire/evaluate (female vs. male).

### Results

The results indicated as predicted that masculine forms lead to the 'lack of fit' for women in the leadership context, whereas alternative forms reduce it. Women were less likely to be employed for leadership positions (Study 1) and evaluated less favorably as leaders (Study 2) than their male counterparts with masculine forms. However, with alternative forms no differences in employment decisions and evaluations of women and men were found.

### Limitations

These two studies were conducted with student-samples. Further research is needed to replicate effects with relevant samples as HR-managers and to investigate underlying mechanisms.

### Research/Practical Implications

Organizations may use alternative forms instead of masculine forms in job advertisements for leadership positions to overcome barriers for women in leadership.

### Originality/Value

These are the first studies in testing the effects of language forms in the leader selection and evaluation.

### **The assessment center gender paradox: How a 'tailor made' manager suit fits female candidates?**

Varda Wiesel (Bar-Ilan Univ.)  
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### Purpose

Managerial assessment centers are widely used to select high-level managers. A review of the literature exposes a 'gender paradox'. Although assessment centers are not 'gender-neutral' and favor men, women have been found to be more successful. The aim of the study is to explore this paradox and gain a better understanding of the underlying dynamics that account for women's success.

### Design/Methodology

The study was conducted in a male dominant organization, and used both quantitative and qualitative methods. The quantitative stage compared various ratings of women (N=210) and men (N=611) candidates of the managerial assessment centers. In the quantitative stage, 30 semi-structured interviews were performed with assessment center raters.

### Results

Findings of the study showed that the assessment center was perceived as posing more difficulty to women than to men candidates, leading raters to rate women higher than men to counter this disadvantage. We named this the 'benevolent effect'. Interestingly, this effect was evident when the candidates behaved in a stereotypical feminine manner, but not when they behaved in a stereotypical masculine manner.

### Limitations

The study was conducted in a male dominant organization and findings may not apply to other organizations.

### Research/Practical Implications

The findings are discussed with regard to the Ambivalent Sexism Theory (Glick and Fiske, 2006) and the Theory of De-gendering and Re-gendering (Lorber, 2005).

### Originality/Value

This is a first attempt to use a mix of quantitative and qualitative methods to reveal and gain a deeper understanding of the underlying processes that lead to assessment centers' gender paradox.

## Gender differences in motivating trust between strangers

Alex Mislin (American Univ.) [mislin@american.edu](mailto:mislin@american.edu),  
Brooke Shaughnessy (Technische Univ. München),  
Lisa Williams (Niagara Univ.)

### Purpose

The decision to trust is inherently gendered – women are motivated by different information than men. Specifically, cognitive and affective antecedents to trust between strangers may be overlooking an important contextual factor – the influence of gender on social role motives.

### Design/Methodology

228 undergraduate students (114 sender-receiver dyads) participated in the double-blind trust game in exchange for real money. The cognitive incentive manipulated the potential gains (x2 vs. x4 amount sent) from trust where the affective incentive (happy emotion vs. neutral) was manipulated through a video clip.

### Results

The happy emotion manipulation motivated only women to trust more, not men as predicted. We had predicted that men, not

women, would be induced by the higher potential gains to trust more due to their agentic (instrumental) tendencies, but this was not supported.

### Limitations

The current results are the product of an experimental, anonymous exchange. Future research would benefit from examination of trust decisions that are not anonymous.

### Research/Practical Implications

These results suggest systematic albeit complex gender differences in factors that motivate trust to facilitate exchange. The trend for female participants indicates that the socially expected communal role may play an important part.

### Originality/Value

At present, this is the first study to examine gender and gender-specific incentives to trust. It represents the first step toward reducing the trust gap for contemporary women engaging in initial, anonymous exchange.

## Gender stereotypes and authentic leadership – An opportunity for female managers?

Susanne Braun (Technische Univ. München) [s.braun@tum.de](mailto:s.braun@tum.de), Claudia Peus (Technische Univ. München), Dieter Frey (Ludwig-Maximilians-Univ. München)

### Purpose

Despite extensive research it remains unclear whether women in management should adapt to male standards or use a typically female leadership style (Eagly, 2007). In response to this gap in literature, we integrate two prominent, yet hitherto unrelated fields of study: gender stereotypes (Heilman & Eagly, 2008) and authentic leadership (Avolio & Gardner, 2005).

### Design/Methodology

In Study 1, 151 working adults indicated perceptions of authentic leadership and femininity/masculinity based on their experiences with a male or female manager. In Study 2, 99 working adults rated the degree to which they ascribed authentic leadership to male or female managers in general.

### Results

The extent to which female managers were perceived as authentic related positively to perceptions of manager femininity, whereas male managers' authenticity was not significantly related to perceptions of masculinity (Study 1). Further, a significant interaction of manager and participant gender occurred (Study 2). Female participants ascribed significantly higher levels of authentic leadership to female managers, while male participants ascribed equal levels of authentic leadership to women and men.

### Limitations

These initial results require further testing to detail the consequences of authenticity for evaluations of female managers.

### Research/Practical Implications

Our findings suggest that authentic leadership can be an opportunity for women to integrate gender roles and managerial responsibilities. It offers a new perspective to fostering female managers' career advancements.

### Originality/Value

To our best knowledge, these are the first empirical studies to combine gender stereotypes and authentic leadership research.

## Training: New Insights on the Long Way to Successful Transfer

Session Chairs: *Alexandra Paraskevi Diethert* (Ludwig-Maximilians-Universität München) [nikitopoulos@psy.lmu.de](mailto:nikitopoulos@psy.lmu.de), *Simone Kauffeld* (TU Braunschweig) [s.kauffeld@tu-braunschweig.de](mailto:s.kauffeld@tu-braunschweig.de)

### State of the Art

It has repeatedly been mentioned by researchers and practitioners that the professional development of employees is a crucial factor for organizational success (Hurtz & Williams, 2009). Although learning/training motivation is obviously linked with training participation and various training outcomes, e.g. transfer (Colquitt, Le Pine & Noe, 2000), these topics are usually investigated separately from each other.

### New Perspective/Contribution

The six contributions of this symposium unite empirical research and theoretical considerations of all stages in the employee development process. Starting with a systematic review, Kyndt et al. present 117 antecedents of employee participation in work-related learning which they identified in 56 studies. Second, the adaptive conjoint analysis of Diethert and Weisweiler reveals participants' preferences for several trainer and training characteristics. Third, Knipfer and Sparr integrate the processes of reflection and feedback seeking in their model of learning and transfer of learning. Fourth, Ebner et al. explore the role of self-leadership in stress management: self-efficacy enhancing training. Fifth, Massenberg et al. show that the target-specific effect of team commitment on motivation to transfer is mediated in series by reactions to training and work environment. Sixth, Seiberling and Kauffeld show that volition is perceived differently from motivation and explains additional variance in the transfer of training.

## Conclusion and Implications for Research/Practice

This symposium understands employee development as a series of linked and interacting processes that are discussed in the various contributions. It strives for a closer exchange of knowledge between researchers and practitioners in the field of employee development.

## ***Presentations of the Symposium***

### **The antecedents of employee participation in work-related learning: A systematic review**

*Eva Kyndt (Univ. of Antwerp)*  
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#### State of the Art

Many researchers, human resource development professionals and policy makers have stressed the importance of work-related learning for employees in order to keep up with the rapidly growing and changing society. The continuous development of employees can enhance organizations competitive position, while at the same time this learning contributes to the sustainable employability of individuals.

#### New Perspective/Contribution

A systematic review study was conducted in order to explore the antecedents of work-related learning. In total 56 studies met the criteria for inclusion. The results show a positive relationship between intention and participation. A learning intention is foremost related to the attitude, subjective norm, self-efficacy and career-related variables of the employee. Important predictors of actual participation in work-related learning are firm size, initial level of education and self-efficacy of the employee, support by managers and opportunities within the organization.

## Research/Practical Implications

In total 117 antecedents were identified. Based on the results of the study, it can be argued that a greater integration of individual, job and organizational characteristics is needed. Several studies fail to fully explain their results due to the fact that they often focused solely on the individual disregarding the fact that this individual is nested within an organization.

#### Originality/Value

In general it can be concluded that the research on work-related learning gives a scattered impression. Future research should try to build a coherent model. By providing an overview of the existing research, this review study hopes to contribute to the future coherence of this field of study.

### **The ideal training through the eyes of consumers: A conjoint study**

*Alexandra Paraskevi Diethert (LMU München)*  
[nikitopoulos@psy.lmu.de](mailto:nikitopoulos@psy.lmu.de), *Silke Weisweiler (LMU München)*

#### Purpose

When selecting training, consumers can choose between multitudes of offers. We know that consumers experience high uncertainty in service purchase situations (Nelson, 1970). In order to reduce their uncertainty and to estimate the expected service quality, they get involved in information search at both personal and impersonal sources (Murray, 1991). We were interested in relevant aspects that influence how consumers choose vocational training.

#### Design/Methodology

Based on a literature review and a pre-study three training (e.g., reputation, prize) and five trainer characteristics (e.g., education, age, sex) were selected and analyzed in an Adaptive Conjoint Analysis (ACA) design. In order to enhance generalizability, subjects (N=372)



were randomly advised to one of two study conditions: they indicated their preferences either in the context of soft-skill or hard-skill training.

#### Results

Participants' choice of training was mostly influenced by word-of-mouth processes and the trainer's education. Participants' preferences varied between the two conditions with respect to trainers' sex and age.

#### Limitations

In a next step written information about the trainer and training could be combined with visual information, e.g. a picture of the trainer.

#### Research/Practical Implications

Training providers should include the results of this study in their marketing activities, e.g. by providing more information about the trainer's education and recommendations of former participants.

#### Originality/Value

By analyzing consumers' implicit trainer and training preferences in an ACA, this study provides a realistic picture of the cognitive processes involved in the choice of training. The results are discussed with respect to research about service purchase and stereotypic quality judgements.

### **The significance of reflection and feedback seeking for transfer of learning in managerial training**

*Kristin Knipfer (TU München) [kristin.knipfer@tum.de](mailto:kristin.knipfer@tum.de), Jennifer Sparr (TU München)*

#### State of the Art

Reflection on one's own work practice is one of the central mechanisms of learning at work (e.g., Knipfer, Kump, Wessel, & Cress, 2012). Feedback is crucial for reflection to translate into performance improvement ultimately (Anseel, Lievens, & Schollaert, 2009). Proac-

tive feedback seeking is an effective way to get feedback whenever needed. Current models of transfer of learning, however, rather neglect the role and interplay of reflection and feedback seeking.

#### New Perspective/Contribution

We propose an integrative model of transfer of learning that includes both reflection and feedback seeking. We argue that proactive feedback seeking supports reflective learning by gathering information on success or failure of transfer – thus facilitating sense making from a specific transfer experience. We will report on first results from our research that tests the proposed model within the context of managerial training.

#### Research/Practical Implications

We shed light on the significance of reflection and feedback seeking as proactive learning behaviours to augment our understanding of transfer of learning. We will give recommendations on how to design training experiences that foster reflective learning and feedback seeking to enhance transfer of learning.

#### Originality/Value

Our discussion of the significance of reflection and feedback seeking for transfer of learning highlights the role of the active learner. We integrate literature on training effectiveness and training transfer, reflective learning, and feedback seeking to augment our understanding of antecedents of transfer of learning. This contribution should be of particular interest to those interested in designing for reflective learning in formal trainings.

### **Stress-reduction without intent: How self-leadership coaching helps to cope with stress**

*Katharina Ebner (TU Braunschweig) [k.ebner@tu-braunschweig.de](mailto:k.ebner@tu-braunschweig.de), Eva-Maria Schulte (TU Braunschweig), Simone Kauffeld (TU Braunschweig)*

**Purpose**

Trainings enhancing self-leadership have been shown to raise coping-abilities significantly (Unsworth & Mason, 2011). Yet, empirical data showing how such trainings specifically work is lacking (Houghton et al., 2011). Because self-efficacy essentially contributes to coping, this study considers self-efficacy as factor influencing the relationship between self-leadership strategies and coping abilities. Furthermore, a control group contributed to analyze the effect of a group coaching-intervention fostering self-leadership.

**Design/Methodology**

More than 750 students participated in the study. More than 50% of them took semi-structured group-coaching enhancing the use of self-leadership strategies; the control group underwent no coaching. Six self leadership-strategies, two facets of self-efficacy, and four stress coping-mechanisms were measured before and after the short-term coaching. Hypotheses were tested via structural equation- and latent change-models.

**Results**

Behavioral and cognitive techniques of self-leadership were observed to significantly contribute to coping-abilities. Additionally, self-efficacy was found to contribute to that relationship, too. Latent change-modeling showed that self-leadership was significantly stimulated in the coaching group proving the intervention as effective tool of stress-reduction via self-leadership

**Limitations**

Sample and control group comprised students only which possibly constrains finding.

**Research/Practical Implications**

The study has practical implications for interventions supporting stress management. Practically speaking, institutions offering semi-structured group-coaching focusing on competency beliefs and self-efficacy of clients

provide a preventive approach to academic stress.

**Originality/Value**

The study's originality stems from (a) its methodology (SEM, latent change), (b) its design comprising a control group and multiple points of measure still unusual for research on coaching, and (c) from analyzing multiple facets of self-efficacy as factors influencing stress-management.

### **Effects of team commitment, reactions to training and work environment on motivation to transfer: A three-path mediation**

*Ann-Christine Massenberg (TU Braunschweig) [a-c.massenberg@tu-braunschweig.de](mailto:a-c.massenberg@tu-braunschweig.de), Anna Grohmann (TU Braunschweig), Simone Kauffeld (TU Braunschweig)*

**Purpose**

Work environment, trainee's commitment and his/her reactions to training have been shown to influence the trainee's motivation to transfer which is an important factor in the training transfer process (see Gegenfurtner, Veermans, Festner & Gruber, 2009). While researchers often consider the organizational commitment (e.g., Seyler, Holton, Bates, Burnett & Carvalho, 1998) we propose a target-specific focus of commitment: team commitment. The purpose of the study is to analyze the interplay of these variables: What comes first?

**Design/Methodology**

Before and after a 1-day team reflexivity intervention N=233 participants answered a questionnaire. Team commitment was measured at t1 (before intervention) using an adapted version of the OCQ (Mowday, Steers, & Porter, 1979). The work environment and motivation to transfer were measured at t2 (6 weeks after intervention) using the GLTSI (Kauffeld, Bates & Holton, 2008). Reactions to

training were measured at t2 using the MEI (Kauffeld, Brennecke & Strack, 2009).

#### Results

Results from a three-path mediation show that the target-specific effect of team commitment on motivation to transfer is mediated in series by reactions to training and work environment.

#### Limitations

All data were collected from industrial workers of two medium-sized German companies and from one source only. Causal interpretations are limited because of the study design.

#### Research/Practical Implications

Researchers and practitioners get important information about how to enhance a trainee's motivation in an optimal way.

#### Originality/Value

The study underlies the importance of considering target-specific antecedents in the training transfer process and leads to a greater understanding of the successively mediating process that lead to high motivation to transfer.

### **Volition to transfer: Making transfer of training happen**

*Christian Seiberling (TU Braunschweig) [christian.johannes@gmail.com](mailto:christian.johannes@gmail.com), Simone Kauffeld (TU Braunschweig)*

#### Purpose

Motivation to transfer, the intention to perform newly acquired knowledge and skills at work, has proven to be an important mediating factor in predicting transfer of training. However, in order to carry out formulated intentions volitional processes that energize the maintenance and enactment of intended actions are required. The purpose of this study is to seek a better understanding of the role of volition in the learning transfer system.

#### Design/Methodology

Longitudinal data from participants of a 2-day leadership training (t1 directly after training, t2 8 weeks after training) were collected assessing variables of the work environment, motivation to transfer, volition to transfer and transfer of training.

#### Results

Confirmatory factor analysis (n=443) suggests that motivation and volition to transfer are being perceived as two different constructs. Hierarchical linear regression (n=453) shows that additional variance in the transfer of training can be explained when taking volition to transfer into account. Path analysis (n=265) suggest a partial mediation of variables of the work environment via motivation to transfer (mediator 1) and volition to transfer (mediator 2) on transfer of training.

#### Limitations

It remains to be tested how much our results generalize to other training settings. The low return rates of questionnaires at t2 may also constrict generalizability.

#### Research/Practical Implications

These results imply that with volition to transfer a relevant construct in the transfer of training has been detected.

#### Originality/Value

To our knowledge, the study is the first to systematically analyze the role of volition in the transfer of training.

### **How will Present Characteristics Tell about Tomorrow Human Resource Development?**

*Session Chair: Ubolwanna Pavakanun (Thammasart Univ.) [ubolwanna@gmail.com](mailto:ubolwanna@gmail.com)*

Characteristics, in both individuality and leadership attributions, are well accepted to be one of the critical factors in predicting the

future success or failure of both individual career and organizational enterprise. In order to elucidate their characteristics and other related factors for planning of future management and development, five different types of subject groups in Thailand are studied. Two longitudinal studies, by using meta-analysis method, are emphasized in Thai Organizational Effective Leaders' Attributions during 1996 – 2011, and in Thai executives and officers' Spiritual Intelligence in Service business during these fifteen years. The other three cross-sectional studies are aimed to research in Entrepreneurial Orientation and Effective Leadership of Entrepreneurs in the Best Home-stay Business, in Leadership Effectiveness and Cognitive Style of Middle Managers in the United Standard Terminal Public Company Limited Group, and in the Big Five Personality Types, Antisocial Personality, and Self - Esteem of Prisoners in Suratthani Central Prison in 2012. All these five researches are also studies to the other factors which assumed to be correlated to the main factors in each study.

### ***Presentations of the Symposium***

#### **The characteristics of organizational effective leaders in Thailand**

*Ubolwanna Pavakanun (Thammasart Univ.)  
ubolwanna@gmail.com*

Four Thousand, three hundreds, and ninety - four executive managers and entrepreneurs from 20 businesses of 4 types of organization in Thailand (government organization, public enterprise, public health service organization, and private organization), of which researched during 1996 – 2012, are studied of the effective leader's characteristics by using the same method and idea of GLOBE research project. Results, which analyzed by meta-analysis method, show that individuality is the least effective leader's characteristic, except in

government group which power distant is the least effective character being leader. Beside, future orientation is the most effective leader's characteristic, except in the group of public health service and private organization which masculinity is the most effective leader characteristic. Different results are found according to the type of the organization. Further study in the results of the effective leader's characteristics between pre-1996 and post-2011-2012 crisis events in Thailand, found the consensus results in every characteristics. This result shows the consistency of the effective leader's characteristics in Thai culture. Other related factors mostly show in the same pattern as the effective leader's characteristics. However, the different details are varied by the type of the organization.

#### **Perceived quality of service by customer, and entrepreneurial orientation, effective leadership, and styles of thinking of entrepreneurs in the best home**

*Kiddee Yongprakit (Bangkok Dusit Medical Service, PCL, TH) kiddeyon@gmail.com*

The purpose is to study the attributions and the correlations of entrepreneurial orientation/personality, effective leadership, styles of thinking influence to the service quality as perceived by customer. 15-25 Entrepreneurs of the best home stay business in Thailand and the customers during high season (June - December 2012) of these best home stay subject group, are studied. Research instruments are individual structure interviews, and questionnaires. The research is on processing.

**Organizational culture, organizational ethics, leadership effectiveness, and cognitive style of middle managers in the united standard terminal public company limited group**

*Noppadol Punnokkhaew (United Standard Terminal Public Company Limited, Mitrphol Wareho) [interj99@hotmail.com](mailto:interj99@hotmail.com)*

The objective is to study the characteristics and the relationships of organizational cultures, organizational ethics, leadership effectiveness, and cognitive styles of the middle management level . 150 - 175 representatives of this management level from the United Standard Terminal Public Company Limited Group, are studied. The research tools include five questionnaires. The results are on process.

**Organizational culture, leadership effectiveness, organization engagement and intention to stay of operation level from the thailotte company limited**

*Tatsanai Suwannarat (Thammasat Univ.) [tatsanai@lotte.co.th](mailto:tatsanai@lotte.co.th)*

The objective of this research is to study the nature and the relationships of organizational culture, leadership effectiveness, organization engagement and intention to stay. The sample of the research comprises of 136 representatives of operation level from the Thailotte Company Limited. The research tool includes questionnaires of the personal information, the organizational cultures, the leadership effectiveness, the organization engagement and the intention to stay. The statistics include frequency, percentage, mean and standard deviation. Hypotheses were tested by the Pearson's product moment coefficient correlation and the Stepwise multiple regression analysis. The results are on process.

**Autonomy at Work: An Important Element to Stimulate Vitality?**

*Chair: Tinka van Vuuren (Loyalis / Open Univ. Heerlen) [tinka.van.vuuren@loyalis.nl](mailto:tinka.van.vuuren@loyalis.nl)*

**State of the Art**

Nowadays, autonomy is an important element for a vitalizing job. It is broadly theorized that more autonomy leads to intrinsic motivation, vitality (Ryan & Deci, 2008), work engagement and better performance (Bakker & Demerouti, 2008; Hackman & Oldman, 1976; Karasek, 1979).

During this scientist-practitioner forum we will share our research and professional experiences regarding autonomy at work. It includes five presentations and an interactive discussion. We will ask the audience to discuss their responses to statements about practical implications of our work.

**New Perspective/Contribution**

Pauline van Dorssen (W/O psychologist / Trainer) investigates how people differ in autonomous behaviour and if it is possible to improve autonomy by self-leadership training.

Maria Candida Baumer de Azevedo (HR & Career Management Consultant & MBA Teacher) explores the phenomenon of "parallel careers" and relates this to contemporary autonomous career planning.

Stephan Corporaal (HRM Lecturer & Researcher) found that young job seekers have less and different needs for autonomy than other generations.

Hiske den Boer (HR & Change Management Consultant) explores if autonomy is an important factor in job design, to promote work at older ages.

Christiane de Lange (Psychology Lecturer) and Tinka van Vuuren (Consultant & Professor in

SHRM) investigate if autonomy positively influence the vitality of teachers.

#### Conclusion and Implications for Research/Practice

Our research contributes to knowledge about specific needs for autonomy among different groups and its effects for vitality.

HRM is challenged to improve their policy concerning self-leadership training, talent management and job design to satisfy specific needs for autonomy.

### ***Presentations of the Symposium***

#### **Preconditions for individual self-leadership and effects for employee vitality**

*Pauline van Dorssen (Pauline van Dorssen - HR Training & Consult) [advies@paulinevandorssen.nl](mailto:advies@paulinevandorssen.nl)*

##### Purpose

This literature review analyzes individual differences on the concept of self-leadership theorized by Manz (1986). Current knowledge of preconditions for effective self-leadership behaviour is analyzed. Besides, research on the effects of self-leadership on vitality is summarized.

##### Methodology

This literature research was conducted by a systematic search in relevant international journals.

##### Results

People differ in general causality orientation. People with an autonomy orientation are expected to be more effective in self-leadership behaviour than people with a control orientation. Training of self-leadership skills is especially effective for individuals low on self-leadership behaviour. An empowering leadership style by external leaders positively influences individual self-leadership. However, self-managing teams inhibit effective individu-

al self-leadership. Positive effects of self-leadership on employee vitality are more self-efficacy, job-satisfaction, career success, better performance, stress reduction and less absenteeism.

##### Limitations

The research is limited to mainly cross-sectional studies on self-leadership, while less attention is paid to other linked concepts like self-regulation and self-management.

##### Practical implications / Statement for discussion

HR need to adjust self-leadership development to the special needs and limitations of their workforce, otherwise the effectiveness of self-leadership development will be low.

##### Originality/value

Many self-leadership development programs are provided without knowledge about the necessary preconditions. This study on preconditions for self-leadership contributes to filling this knowledge gap.

Pauline van Dorssen works as W/O psychologist; she trains employees and managers in the improvement of (self) leadership behaviour.

#### **Parallel Careers and its consequences to companies in Brazil**

*Maria Candida Baumer de Azevedo (People&Results / MBA Business school Sao Paulo) [mariacandida@peopleandresults.com.br](mailto:mariacandida@peopleandresults.com.br)*

##### Purpose

This paper reports on the parallel careers phenomenon and its consequences for companies.

##### Design/Methodology

A qualitative approach was employed, using semi-structured one-to-one interviews with Human Resources executives from different companies and with parallel careers holders .



### Results

The perception regarding parallel careers varies. Three different patterns were identified. Companies differentiate from one another by their attitude towards the subject, being against, indifferent or promoting it. Parallel careers are used as a great retention tool, a satisfaction maximizer, a powerful development mechanism, and a cheap source for acquiring new competences. On the other hand risks of having conflict of interests and losing the professional to the other career were also mentioned, followed by the risk of missing a better work-life balance.

### Limitations

The research was limited to Brazilian companies and the Brazilian office of multinationals. Further research is needed to evaluate the perception in different geographies.

### Practical Implications / Statement for discussion

Consent of parallel careers will increase the motivation and vitality of employees.

### Originality/Value

There is few data available regarding parallel careers. This article provides an insight into how it works, whether it is present, and how it can be used for talent management.

Maria Candida Baumer de Azevedo is a consultant on career and culture management in Brazil and a MBA teacher.

## Young job seekers' preferences for autonomy

Stephan Corporaal (Saxion Univ. of Applied Sciences) [corporaal@icloud.com](mailto:corporaal@icloud.com)

### Purpose

In recent years, marketing and recruitment research suggested that young job seekers have unique, new preferences for job and organizational characteristics due to generation effects, age-effects or life-span effects.

The purpose of this study is to develop and validate an instrument to measure young job seekers' preferences for one of these characteristics: autonomy.

### Design

We used outcomes of a qualitative study under 433 undergraduate students in the Netherlands to operationalize job and organizational characteristics and generate items. After constructing the instrument, we gathered data from a sample of 1659 undergraduate students to test it. We assessed the reliability of scales using Cronbach's Alpha and performed an explorative and confirmatory factor analysis.

### Results

Our study reveals that young job seekers associate autonomy with different aspects than are measured with existing scales commonly used in this line of research (mainly job design scales of e.g. Hackman & Oldham, 1967). Furthermore, young job seekers appear to use another language to express their preferences. We developed an instrument that adequately captures their specific preferences.

### Limitations

We need to perform extra tests to access the convergent and discriminant validity of scales.

### Practical implications / Statements for discussion

Organisations make the youngest generation job seekers more happy with clarity and managerial trust than with autonomy. Only if organisations provide this generation with clarity and trust, organisation will be able to retain them.

### Originality

Insight in specific Our research brought new perspectives for attracting young job seekers

Stephan Corporaal works as lecturer Human Resource Management at Saxion.

### Job design for older workers

Hiske den Boer (Open Univ. Heerlen)  
[hiskedenboer@gmail.com](mailto:hiskedenboer@gmail.com)

#### Purpose

This literature review explores the importance of job design on vitality and sustainable employability of older (55+) workers.

#### Design

Using literature on aging and work, this review applied a model to identify reasons for older people to remain working, interventions to improve the employability of older workforces, and job design factors to promote work at older ages.

#### Results

This review presents three lessons. 1) Work continues to be important. For many people working longer is both inevitable and desirable. 2) Few employers actively prepare for the challenges in relation to the aging workforce. And if they do so they tend to focus on workplace conditions, rather than structurally redesigning jobs to better suit the needs and abilities of older workers. 3) Job design factors, such as level of autonomy, presence of challenging work, support from coworkers, variety of tasks and the need for social contact, appear to be relevant and meaningful to older workers, but it is not yet proven that these also lead to older workers actually deciding to work longer or not.

#### Limitations

It remains to be reviewed how the results compare to other workforce groups such as younger workers.

#### Practical Implications / Statement for discussion

Job design will facilitate older employees to enhance the quality of their work life and enable them to work longer.

#### Originality

This review contributes to the importance of job design in the context of the aging workforce.

Hiske den Boer is an experienced HR and Change Management Consultant.

### The relationship of autonomy on the vitality and workability of teachers

Christiane de Lange (Hanzehogeschool - Univ. of Applied Sciences) [c.a.de.lange@pl.hanze.nl](mailto:c.a.de.lange@pl.hanze.nl), Tinka van Vuuren (Loyalis)

#### Purpose

The purpose of this study is to investigate the relationships between 'autonomy' and the 'satisfaction of the basic needs' (in particular the need for autonomy), and the self-reported levels of 'vitality', 'workability' and 'employability'.

#### Design

883 employees of high schools in The Netherlands completed a questionnaire containing the Work Ability Index, a job control scale, the work-related basic need satisfaction scale, an employability scale and the work engagement scale.

#### Results

Stepwise multiple regression analysis showed significant relations between 'autonomy' and the 'satisfaction of the basic needs', with self-reported levels of 'vitality', 'workability' and 'employability'.

#### Limitations

Future research is needed to assess whether different environments and different types of autonomy effect the relationships found in this study.

#### Research/practical implications

Human Resource Management need to address and satisfy the need for autonomy of

their employees, if they want a sustainable workforce.

#### Originality

As relatively little is known about the effects that autonomy, and the satisfaction of the basic needs (in particular the need for autonomy) have on vitality, workability, and employability, this study provides new insights on how job-resources can be effective when managing an aging population.

Christiane de Lange works as a lecturer at the Human Resource Management and Applied Psychology departments of the University of Applied Sciences in Groningen, The Netherlands.

Tinka van Vuuren is a Senior Consultant at Loyalis Kennis & Consult and has a professorship Strategic HRM at the Open Universiteit, both in Heerlen, The Netherlands

## Dialogue of scientists and practitioners about Coaching

*Siegfried Greif (IwFB GmbH, Hagen, Germany) [sgreif@uni-osnabrueck.de](mailto:sgreif@uni-osnabrueck.de), Simone Kauffeld (Technische Universität Braunschweig, Braunschweig, Germany), Denis Murlane (murlane management consultants, Frankfurt / Main, Germany), Sybille Wolff (Deutsche Bahn, Mobility Logistics AG, Berlin, Germany), Elke Benning-Rohnke (Benning & Company GmbH, Germany), Ulrich Schüler (PMsp project management dr. schüler & partner, Germany)*

Companies report on their coaching processes, successes and experiences, as well as particular cases with their challenges and obstacles. These results will be discussed with scientists from the area of Work- and Organizational Psychology.

Topics will be:

- The Importance of Work- and Organizational Psychology and other disciplines for

coaching (scientific and practical knowledge)

- Organizational resilient as part of the coaching process
- Coaching for high potentials and high performers
- Case study about "The new IT-Director"
- Similarities and differences between Coaching and Psychotherapy
- Outcome evaluation, quality standards and quality management in the field of coaching
- Legal protection of the occupation and prevention of charlatanism

### Invited Panel Discussion

## How do we work today? How do we want to work tomorrow? Marketplace Europe: A European mosaic presented with "Pecha Kucha"

Chair: Alexandra Miethner (Berufsverband Deutscher Psychologinnen und Psychologen e. V., DE) [info@sisu-coaching-training.de](mailto:info@sisu-coaching-training.de)

Speakers:

Alexandra Miethner (Berufsverband Deutscher Psychologinnen und Psychologen BDP e. V., Germany) [info@sisu-coaching-training.de](mailto:info@sisu-coaching-training.de), Tinka van Vuuren (Loyalis / Open Universiteit Heerlen, Netherlands), Ekaterina Molodykh (Moscow University, Russia), Uldis Pāvuls (Energise, Latvia), Paul Jimenez (University of Graz, Austria), Ingrid Hickman (Creating Psychological Capital), Carnot Nelson, Univ of South Florida), Annamaria Di Fabio (Univ. of Florence), Avraham Natan Kluger (The Hebrew Univ.), Kamila Wojdylo (Univ. of Gdansk)

The Marketplace Europe speaks „Pecha Kucha“

The speakers from various European countries will present their views – personal and professional - on the main conference theme: How do we work today? How do we want to work tomorrow?

Pecha kucha is a challenge. 20 powerpoint slides, each will be presented for 20 seconds. 6'40 in total for each speaker. Not a second more. A very dynamic presentation style.

## Position Papers

### The Psychological Contract: Does not Exist?

*René Schalk (Tilburg Univ., NL) [m.j.d.schalk@uvt.nl](mailto:m.j.d.schalk@uvt.nl)*

#### State of the Art

The concept of the psychological contract was introduced in the fifties of the last century to describe implicit ideas on exchanges between two parties. The concept has been applied to work contexts from the sixties of the last century onwards. Initially, the psychological contract was referred to as implicit expectations on the exchange between employee and employer. From the nineties the concept was mainly restricted to individual beliefs on mutual obligations in the exchange between employer and employee.

Many empirical studies and conceptual works have developed Psychological Contract Theory in the last decades. Many aspects of the relation between employer and employee have been covered. There is a general consensus on how a psychological contract can be defined, and what the constituent obligations are. Many studies identified the determinants and effects of experiences of fulfillment or breach of obligations, and the experience of violation of the contractual agreements.

Ideas have been developed on psychological contract types (such as transactional, relational, ideological, balanced), and on the dynamics

of contracting, renegotiation, and reconsideration of the psychological contract.

The psychological contract has become an established concept with a generally agreed upon definition and framework which is included in many Organizational Behavior textbooks.

Recent developments in this field of research extend the general idea of the psychological contract in different ways. Topics and studies have become more focused on the one hand, for example by looking at special forms of contracts such as idiosyncratic deals (i-deals), or ideological deals, or contracts of contingent workers. On the other hand, the concept is starting to be used in a broader way, for example by looking at the psychological contract between team members or psychological contracts in volunteer work.

It is time for a reconsideration of the concept of the psychological contract and a reflection on future directions for further development of Psychological Contract Theory.

#### New Perspective/Contribution

Three new perspectives are introduced in the position paper. First, the position is taken that the current framework of the psychological contract in which the concept is limited to the general relationship between employer and employee can be abandoned. The psychological contract is "individual beliefs on mutual obligations in the exchange between two parties". The parties involved are not limited to employer and employee. A psychological contract in the work context can also exist between parties such as supervisor and employee, between members of a cooperating team, between client or customer and employee, etcetera.

Second, a critical view is presented on the constituent elements of the psychological contract. The use of constructs such as "obli-

gations”, “promises”, “idiosyncratic deal” seems to suggest that the psychological contract primarily consists of agreements based on specific promises about what each of the parties promises to deliver to the other party. These promises are assumed to create obligations that both parties have to fulfill. We argue that every psychological contract encompasses many general (implicit) obligations, next to the specific promise-based obligations, that although never discussed, negotiated or promised, play a crucial role in experiences of breach or violation of the contract.

Third, we argue that the theoretical conception of the dynamics of psychological contracting and reactions to psychological contract breach and violations needs to be further developed. Further conceptual work and theory development is needed. In its current state, psychological contract theory can not predict why employees in similar circumstances who have comparable psychological contracts can react in very different ways, for example in the circumstance of organizational changes. Psychological Contract Theory does not as yet explain why some employees may react with negative behaviors (exit, neglect), while others opt for more positive behaviors (voice, loyalty) when a psychological contract is not fulfilled.

#### Conclusion and Implications for Research/Practice

Three important problematic issues in Psychological Contract Theory are addressed. First, we argue that the psychological contract is a concept that can be applied to different types of exchanges between parties. Second, it is shown that the psychological contract encompasses more than idiosyncratic obligations based on specific promises made by both parties. Third, critical factors that determine outcomes in the dynamics of breach and violation are highlighted. Psychological Contract Theory is extended by including these additions.

The ideas presented provide a framework for managers that can help them to determine best ways to deal with experiences of psychological contract breach or psychological contract violation of employees. In addition, the framework can help managers to get a better and more systematic view on the dynamic processes of exchanges between diverse parties in the organization.

#### Coaching – Practice or Science Based?

*Siegfried Greif (Univ. of Osnabrueck, DE)*  
[sgreif@uos.de](mailto:sgreif@uos.de)

##### State of the Art

The presentation reviews the history and state of the art of coaching practice and science. Coaching is one of the fastest growing professions and promising personal development interventions. Worldwide there are about 47,500 active coaches, the largest number of 17,800 in Western Europe, 2,000 more than in North America (ICF, 2012).

The existing coaching services and methods have been mainly created by practitioners. Eminent practitioners founded coaching schools and coaching educations. Sir John Whitmore is a worldwide known example. He has been a famous car-racing champion. In his second career, influenced by humanistic Psychologists like Carl Rogers, he developed his GROW-Model of coaching. His “model” is an outstanding prototype of a scientifically informed practice based coaching concept.

Classifying the closeness to science, we may differ between practice based, scientifically informed and partly or strongly scientifically based concepts. Scanning the Internet for the top coach education and training internet offers in the USA, Britain and Germany, in about a third of 50 presentations in each region not a single scientific terms or citation could be identified. Many presentations emphasize, that the training follows an approach,

based on their extensive practical experience and cite comments of satisfied participants. Only few explicitly refer to scientific theories and research

Also the self-presentations of professional coaches in the Internet seldom cite scientific literature and research. Many practitioners prefer to create standalone concepts and methods. Similar to counselors, many prefer to invent new technical terms and use them for branding and marketing of their services. Several coaching concepts have protected their labels by trademarks.

Only since the last ten to twelve years scientifically based coaching concepts and research stepped on the stage. In 2002 the "Interest Group on Coaching Psychology (IGCP)" group was founded in the APS (Australia) and became the second largest unit. Its first aim was "to enhance the practice of by linking researchers and practitioners." In 2003 at the University of Sydney, Australia, Tony Grant founded the first Coaching Psychology Unit. Colleagues from Britain, in 2004 followed with a Coaching Psychology group of the BPS. Thereafter, the International Society for Coaching Psychology has been founded. Coaching Psychologists strongly propagates Evidence Based Coaching. May be partly as a consequence, especially in Australia and Britain, coaching research has grown exponentially.

Scientific coaching concepts draw on psychotherapeutic schools and methods, especially the humanistic approach of Carl Rogers, Cognitive-Behavioral Therapy, Solution-focused Therapy, Positive Psychology and lately Developmental Therapy. It is remarkable, that only few exceptions derive their methods systematically from to basic psychological theories and research, e.g. on emotion and motivation, self-organization and -regulation, individual differences or social interactions. Lately it has become popular to refer loosely to neuropsy-

chological views. Only some insiders seem to apply knowledge from the field of Work and Organizational Psychology. I followed the discussions of the Linked in® group "Coaching at Work" and found almost no scientific references. E.g., in a discussion on "the five best tools" for executive or leadership coaching, no one referred to tools derived from psychological leadership theory or existing evidence for effective transformational leadership training or coaching methods.

The contribution reviews of the state of the research results of 18 known randomized controlled trials (RCT) coaching outcome studies. Evidence on the effectiveness of coaching, based on these studies is inconsistent, ranging from low to strong effects. Furthermore, the coaching concepts and the outcome measures are very heterogeneous and hardly comparable. The referee takes the thesis, that practitioners welcome such research, if it confirms the effectiveness of coaching. However, only few follow the research literature and derive their tools systematically from existing evidence based methods. Linking researchers and practitioners in the field of coaching is a goal that is still not achieved.

#### New Perspective/Contribution

Why should coaching practitioners care for more scientific foundation of their strongly demanded service? Four reasons can be cited: (1) professional quality improvement and delineation from charlatans, (2) justification of the usefulness of coaching against skeptical customers, (3) evidence based selection of coaching methods, and (4) improvement and innovation of intervention methods. The perspective presented here is to convince practitioners that a more systematic scientific foundation of coaching tools by basic psychological knowledge and evidence based intervention methods contributes to all four topics.

Goal clarification and planning, often seen as one the core methods of coaching, but based



on the Rubicon-Model of motivation (Gollwitzer, 1999) we expect that this has only a low effect on behavior changes and goal attainment. RCT-studies show that an additional supporting the formation of firm action implementation intentions rise the probability of behavior changes substantially. Only few coaching concepts know about and use this intervention method systematically.

The Rubicon-Model is incomplete. It does not embrace external and inner transfer barriers or unexpected changes in the transfer situation. We therefore have extended the Rubicon model. In addition to the formation of implementation intentions we accompany and systematically support the coachee directly in the phase of transfer trials as long as necessary by a partly new method called Telephone Shadowing. First evidence from a pilot RCT-study shows very strong effects on reported intended behavior changes. We expect that coaches and their customers are very interested in the extended Rubicon model and powerful methods derived from the model, which can be expected substantially enhancing behavior changes.

#### Conclusion and Implications for Research/Practice

The contribution analyzes the evolution of different coaching concepts and methods, developed mainly by practitioners. A scientific foundation has prevailed until today only partially. Its expected value is an improvement of the professional quality, examination of the effectiveness, selection of evidence based coaching methods and their continuous scientifically based innovation. An extended Rubicon model of motivation serves as an example of how to build a bridge between scientific theory and practice. Theory development and research in the field of Work and Organizational Psychology would profit from studying and evaluating different coaching processes, methods and their outcome too. However, for

a solid foundation much more research is needed!

#### ISO Standard on Human Resource Management, Challenge and Opportunity for Psychology as Science and Profession

*Harald Ackerschott (Harald Ackerschott GmbH, DE; ISO Technical Committee 260) [ha@ackerschott.eu](mailto:ha@ackerschott.eu)*

##### State of the Art

Human Resource Management is still searching for its identity between profession and management function. National and international Bodies of HR differ in their approaches and perspectives. For example the Society of Human Resource Management, SHRM, the largest HR member association of the world regards itself as a professional association, formulates guidelines and standards, which define quality of employee management practices across organizations. Top HR Executives of Fortune 500 companies however often define themselves as holders of a management function, as executives of their companies first and foremost.

##### New Perspective/Contribution

The Society of Human Resource Management, SHRM, the largest member association of the world on the topic, initiated the work on an international standard of human resource management, after having contributed to the formulation of ANSI Standards, the first being the recently published cost per hire standard. The International Organisation of Standardization, ISO, provides the framework for drafting this world standard.

The author of this presentation serves as an expert both in the German mirror committee developing positions on the standard and as in the TC 260, the Technical Committee of ISO, which drafts the global standard itself. Lately he was appointed the liaison person to ISO TC 176, the committee that works continuously

on the ISO 9000 family of Quality Management standards.

The international standard on HR management will cover procedures, processes of HR work as well as HR metrics. As goals and reasons for the standard are declared by ISO[1]:

“Global Interest:

- Increasing and improving capacity
- To assist executive decision making
- Enhance and enable measurement of human resource
- Help the profession move from compliance to strategic partner in organization
- Offers legitimacy to the profession
- Best practices to share across borders”

In the presentation, the global system for standardisation in general is described, the current issues of the work on the standard of human resource management itself are outlined and the international perspectives as well as the interests of different stakeholders in this venture are analysed. The implications and opportunities to contribute to this standard are discussed for psychology as a science and a profession.

Conclusion and Implications for Research/Practice

The development of international standards and metrics for Human resource management are currently on their way. I/O Psychologists all over the world contribute to HR management, to its science and practices. HR subjects are highly relevant for psychology as a profession and as a science. For practitioners it is an important market. Psychological profession and science should contribute to this initiative rather than have rules imposed on this important subject by other stakeholders only.

[1] Lee Webster, chair of ISO TC 260: Creating Global Business Value through ISO Human Resource Management Standards, HRIZON, 14th World Congress of Human Resource Management, Melbourne, 27. September 2012

### Single Papers

#### **The career engagement scale: Concurrent and discriminant validity among students and professionals**

*Vanessa Katharina Jänsch (Leuphana Univ. of Lüneburg, DE) [jaensch@leuphana.de](mailto:jaensch@leuphana.de), Andreas Hirschi (Univ. of Lausanne, CH)*

##### Purpose

We present two studies that investigated the convergent and discriminant validity of the “Career Engagement Scale” – a brief scale for assessing the degree of exhibited career management behaviors among university students and professionals.

##### Design/Methodology

Data from 681 German university students and 290 professionals were collected via an online questionnaire. Concurrent validity was examined by correlations between the career engagement scale and established measures of specific career management behaviors (i.e. career planning, career exploration, networking). Discriminant validity was examined with linear hierarchical regression analysis and correlation analysis to behavioral and attitudinal (vocational identity, career self-efficacy) measures.

##### Results

Firstly, hypothesis about concurrent validity was supported by significant relations between career engagement and measures of specific career behaviors.

Secondly, discriminant validity was confirmed in the way that career engagement as a higher-order construct was not redundant with measures of particular career behaviors. Thirdly, discriminant validity was evidenced by higher correlations with career behaviors than with career attitudes in both samples.

#### Limitations

The scale assesses self-reported behaviors and not actual career behaviors. Only a German language version was evaluated.

#### Research/Practical Implications

The scale enables valid measurement of self-directed career management on a higher-order level among students and professionals in career research and counseling.

#### Originality/Value

The scale fills a gap in the literature that is dominated by measure for specific career behaviors but lacks measures for career management on a higher-order level.

### **Career paths and older workers: Antecedents and consequences of employability orientation**

*Amelia Manuti (Univ. of Bari, IT) [amelia.manuti@uniba.it](mailto:amelia.manuti@uniba.it), Valentina Depergola (Univ. of Verona, IT), Giancarlo Tanucci (Univ. of Bari, IT), Valeria de Palo (Univ. of Verona, IT)*

#### Purpose

The objectives of this study were to survey the employability orientation of older workers; to verify which are the antecedents at the individual and organizational level that affect the development of employability in a sample of older workers; to explore the positive influence of employability orientation on the development of employability activities.

#### Design/Methodology

The sample consisted of 300 workers, aged 45 years or more, employed at the administrative areas of the University of Bari. The question-

naire contains socio-demographic items, the section about individual antecedents with scales of "Career Satisfaction" (Cortese, 2001), "Career commitment" (Carson and Bedeian, 1994), "Resistance to change" (Bobbio et al., 2008) and that about organizational antecedents with scale of "Employability Culture" (Nauta et al., 2009), "Organizational Commitment" (Pierro et al., 1992), "Perceived Organizational Support" (Battistelli and Mariani, 2010); the last section composed by scales of "Employability Orientation" (Van Dam, 2004) and "Employability activities" (Van Dam, 2004).

#### Results

Multivariate statistical analysis conducted with SPSS supported our research objectives.

#### Limitations

It would be interesting to consider a sample much larger of older workers by comparing, at the same time, with a sample of workers employed in private companies.

#### Research/Practical Implications

These results show how important it's to reflect on human resource management practices aimed at enhancing the experiential background of older workers.

#### Originality/Value

The study takes place in a context such as the administration of the university whose functioning is known to few and it focuses on the development of employability orientation, specifically, of older workers.

### **Age-related differences in work motives: Same across different countries?**

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#### Purpose

Several studies (e.g. Kooij et al., 2011) have shown relationships between age and work

motives. For example, older employees place more importance on intrinsically rewarding aspects of work life and less importance on extrinsically rewarding job features. Cultural values differ across countries (e.g. Hofstede, 2001) which are likely to influence work motives. This paper examines whether relationships between age and work motives are consistent across countries.

#### Design/Methodology

The initial study was based on data (N=20047) collected in eight European countries using a comprehensive motivation questionnaire which measures key constructs of intrinsic and extrinsic motivation, achievement, power and affiliation motivation. Each country had a sample size > 1000. The sample was split into three age groups corresponding to three generations (gen Y, gen X and baby boomers) and mean scores on work motives compared.

#### Results

Consistent with previous research, older individuals (55+ years) perceived intrinsic job features as more motivating than younger employees and extrinsic job features as less motivating. These relationships were similar across the eight countries; the interaction between age and country was not statistically significant.

#### Limitations

Generational effects were not controlled for and most countries included in this preliminary analysis were all Northern European, being culturally relatively similar. A more diverse set of countries will be included in further analyses.

#### Research/Practical Implications

It has been assumed that relationships between age and motives are generalisable across countries. Testing this assumption has implications for HRM, especially in global contexts, and policymaking.

#### Originality/Value

No studies have examined to what extent relationships between age and work motives hold across different countries.

### **PerDemo - Human resources programs in demographic change – An exploratory study**

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#### Purpose

Facing the omnipresent effects of the demographic change, human resource managers must handle various challenges (e.g. age diversity in teams, working-time models for an ageing workforce, age-based qualifications) with the objective of preserving and enhancing the capacity for innovation.

It is widely claimed that innovation is crucial for the survival of organizations. Therefore, our research project PerDemo, which is supported by the German Federal Ministry of Research and Technology and the European Social Fund, seeks to develop an advanced training program for human resource managers to ensure the employees' capability to be innovative at all stages in life.

#### Design/Methodology

First, we conducted a telephone survey with more than 500 small companies in northern Germany to elevate the awareness and impact of demographic changes. To obtain deeper insights in the nature of handling an aging workforce we subsequently led semi-structured interviews with employees in 50 further organizations.

#### Results

The results of the content analysis of the interviews will be presented.

### Limitations

In our study, we only concentrated on two industries (health care management and maritime industry). Therefore, our results might have limited generalizability.

### Research/Practical Implications

The results may be useful in the context of training human resource employees to be effective in handling the demographic challenges.

### Originality/Value

The two-step design offers a detailed insight into the challenges of the demographic change and how companies and their employees handle them. However, the implementation and application of our results in the working practice is another important component in exposure with demographic challenges.

## Organizational and individual influences of informal continuous learning

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### Purpose

Interest in in-company continuous learning is increasingly rising, both in education policy and in enterprises themselves. More and more enterprises realize that continuous learning of their employees is indispensable to reach organizational goals and to help ensure long-term success (see e.g. Moraal et al., 2009). However, current research programs and organizational initiatives focus on formal aspects of learning; there is relatively little systematic research investigating what influences the individual to participate in informal learning activities.

Based on Maurer et al. (2001) and Schaper et al. (2008), we propose a model of both organizational variables (e.g. the attitude towards learning within a company, corporate philoso-

phy) and individual factors (e.g. job involvement, career goals, self-efficacy) to predict the amount of learning motivation and individual frequency and intensity of actual learning activities.

### Design/Methodology

In a longitudinal design, we gathered data of 202 German employees working in different branches. Organizational and personal variables as well as learning motivation were measured at the beginning of the study using established questionnaire scales. Continuous learning was measured using a diary study over the time-span of eight weeks, focusing on informal learning-activities.

### Results

Results indicate an acceptable model-fit and underscore the relevance of organizational variables like exchange of knowledge and a learning-oriented leadership-style on informal continuous learning activities, both direct and partially mediated by motivational factors.

### Research/Practical Implications

Implications for a successful implementation of in-company continuous learning, especially informal learning activities are discussed.

## Self-regulated performance improvement through deliberate practice in organizations: The case of female employees and skills to career advancement

### Nominee of the EAWOP Congress 2013 Best Paper Award

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### Purpose

Deliberate practice consists of self-regulated, effortful activities aiming to overcome one's weaknesses and thus optimizing current performance. It has proven to be highly effective



in a number of domains including sports, chess and music. Of the few research attempts trying to apply the concept of deliberate practice to the organizational context, none examined the effects of deliberate practice on the improvement of soft skills. In our study, we assume that female employees will effectively improve their career advancement skills (networking, self-promotion, assertiveness and performance attribution) when deliberately practicing their skills over two weeks.

#### Design/Methodology

We asked 66 women and 33 men of a large German corporation to deliberately practice their career advancement skills using adaptively linked Situational Judgement Tests which allow automatic feedback generation. Applying the Internal Referencing Strategy, we assessed motivation and skills in the four training-relevant areas and in two training-irrelevant areas before and after training.

#### Results

Repeated measurement ANOVA supported our hypotheses: Deliberate practice significantly improved the motivation ( $\eta^2=.18$ ) and the skills ( $\eta^2=.45$ ) of female employees in the training-relevant areas, but not in the training-irrelevant areas. In contrast to our hypothesis, men benefit from deliberate practice in career advancement skills to a similar extent.

#### Limitations

It remains to be tested whether the effect remains stable after training.

#### Research/Practical Implications

These results imply that deliberate practice helps female and male employees to improve their career advancement skills.

#### Originality/Value

To our knowledge, this is the first study that applies the concept of deliberate practice to the domain of soft skills in a professional con-

text using a pre-post experimental design and Internal Referencing Strategy.

### **Team-based learning as a method for improving organizational training effectiveness**

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#### Purpose

The implementation of large enterprise software systems like SAP introduces changes to business transactions and processes that require training. An aerospace company in Tulsa, Oklahoma used the traditional SAP training method of an error avoidance (EAT) approach, using scripted exercises to guide participants to the correct solution. Trainees acquired the procedural knowledge to process transaction scenarios that were presented in the training materials; however, the training was less effective for analogical and adaptive transfer. Recent studies suggest that error management training (EMT) and/or team based learning (TBL) would be more effective and appropriate training approaches for analogical and adaptive knowledge transfer.

#### Design/Methodology

Using the organization's population of 69 employees, this study compares the effectiveness of EAT, EMT and TBL for SAP related procedural and adaptive knowledge transfer as well as business performance.

#### Results

Results indicate that a TBL training approach is more effective than either EAT or EMT for procedural performance and adaptive knowledge transfer, while EMT was more effective than EAT and TBL for declarative knowledge transfer.

#### Limitations

The small size of the population and higher standard deviations than expected resulted in



a lack of statistical power and limited data analyses.

#### Research/Practical Implications

A better knowledge of training approaches and their effects on learners and business performance will help companies in the design and implementation of efficient and cost effective training programs for future SAP deployments.

#### Originality/Value

To our knowledge, this study is the first to use TBL for software training in an organization.

### **Evaluation of an interprofessional training approach for patient-centred practice in health care**

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#### Purpose

The purpose of the study was to evaluate a self-compiled interprofessional training approach for patient-centred practice in health care. Based on a model of integrated patient-centredness, it focuses on external (patient-provider interaction) as well as internal participation (within the team), and assumes that both participation forms are required for successful implementation of patient-centred practice in an interprofessional setting.

#### Design/Methodology

A multi-centred (n=12 rehabilitation clinics), cluster-randomized controlled intervention study was conducted using a staff survey before and four weeks after the interprofessional training. Patient data was collected over three separate periods. The rate of return for the patient survey ranged on average between 39% and 48%. Staff questionnaires

reached an average rate of return of 44% for data collection period 1 and 37% for period 2.

#### Results

The results of the staff surveys showed a significant increase of external participation after the training, with nurses benefiting most. Internal participation was enhanced in both the intervention and the control group, although enhancement was higher in the intervention group. The patient surveys showed a slight not significant rise in both internal and external participation.

#### Limitations

The study sample may suffer from selection bias caused by data collection conducted in only twelve clinics in Southwest Germany and the relative low return rates in staff and patient samples.

#### Research/Practical Implications

Interprofessional training is an effective strategy for enhancing patient-centred participation in health care practice.

#### Originality/Value

To the best of our knowledge, we developed the first interprofessional training for collaborative patient-centred practice in Germany.

### **An examination of the 'Backlash Effect' of gender stereotypes: Personality, gender and status inconsistency**

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#### Purpose

Status inconsistency, in which an individual's positioning on one status hierarchy (e.g., education) differs from his positioning on another status hierarchy (e.g., career advancement), has been shown to have detrimental effects on employees' attitudes and behaviors. However, individual differences in perceptions of status inconsistency have not been studied. To

address this gap, the current research examines the association between two personality traits – agreeableness and dominance – and objective and subjective status inconsistency. Moreover, as these traits are subject to gender stereotypes (i.e., agreeable women and dominant men), we sought to find out whether these associations vary between men and women.

#### Design/Methodology

Data were collected from a sample of 375 employees in a large multinational electronics company and the hypotheses were tested with moderated mediation analyses.

#### Results

Agreeable women and dominant men experienced low levels of perceived status detraction. Among men, objective status inconsistency mediated these associations.

#### Limitations

- Low response rate (27%).
- Limited generalizability (one electronics firm).

#### Research/Practical Implications

Overall, our research provides strong evidence for the backlash effect of gender stereotypes: the association between personality and perceived status detraction varied under conditions of gender non-congruent traits (agreeable men, dominant women) versus gender congruent traits (agreeable women, dominant men).

#### Originality/Value

The current study examined status inconsistency as a focal variable for equity perceptions (with inputs incorporating expected returns based on a referent structure which is derived from social standards). To our knowledge, no study examined personality- and gender-based differences in perceptions of status inconsistency, as well as their integrative effect on such perceptions.

### **Could an older worker be regarded as a younger worker? Age stereotypes and age-group relationships in the workplace**

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#### Purpose

Despite the promotion of age-friendly workplace policies by UE governments research over many years has shown that age stereotypes continues to be widespread in the workplaces. The current research examined the role of age stereotypes and age-group relationship (permeability of boundaries between older and younger groups) in attitudes towards work (work disengagement) of younger and older workers.

#### Design/Methodology

A survey was conducted among 323 employees of a service company (53% under 35 and 47% over 50). The sample was extracted considering as screening criteria the role (blue-collar, white-collar, managers).

#### Results

Findings indicated that only for over 50 employees age stereotypes affect the perception of permeability of boundaries between older and younger groups. In addition, the perception of permeability of boundaries moderates the relationship between age and work disengagement.

#### Limitations

The cross-sectional design of the study limits the strength of the considerations about the causal relationships among the variables.

#### Research/Practical Implications

Findings encourage HRM policies that avoid the circulation of age stereotypes in the workplace and promote the permeability of boundaries between older and younger groups in order to motivate older workers to continue to work.

**Originality/Value**

Few studies that investigated age-related processes in the workplace included younger worker in the sample, while it is important to understand how organizations could foster positive intergroup relationships in order to increase the positive attitudes toward work among younger and older employees.

### **Predictors to disabled employees' organizational behavior and involvement in employment**

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**Purpose**

This paper aims to examine the work challenges of disabled employees and predict the organisational behaviours of disabled employees and their involvement in employment.

**Methodology**

A self-developed questionnaire was used to gather relevant information from employers, disabled employees, and the co-workers. The questionnaires were distributed and administered by a number of trained enumerators.

**Results**

Both employers and co-workers perceived that their organisations have provided conducive organisation climate, comfortable work environment and reasonable adjustment for their disabled employees. The disabled employees are found loyal and committed. They are satisfied with the job. Organizational loyalty and commitment are predicted by the organizations' ability to restructure their job design to suit to the needs of the disabled employees.

**Limitations**

Initially this study planned to use purposive sampling; however due to poor database maintained by the relevant agency of disabled employees' employment in the country, we

were unable to identify which employers employ how many disabled employees. The sampling then was based on convenient sampling.

**Research/Practical Implications**

Job design, organisational climate and comfortable work environment have long been recognised for motivating employees' performance (Hackman et al., 1975; Garg and Rastogi, 2005;). Our findings show that these factors also motivate the disabled employees. This is an added value to the existing body of knowledge as limited is known about disabled employees motivation.

**Originality**

This study is unique because it gathers data from several parties: disabled employees, the co-workers and the employers.

### **Organizational politics in performance appraisal: The role of leadership style**

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**Purpose**

We aimed to deepen the study of the relational side of performance appraisal (PA) by investigating the link between raters' leadership style and ratees' perceptions of politics.

**Design/Methodology**

The first study (N = 230 leaders) preliminarily tested the structural and convergent validity of the Questionnaire of Agentic Leadership (QAL; Borgogni, Petitta, Dello Russo and Mastroiilli, 2009), an Italian inventory of leadership styles. The second study (N = 148 dyads) investigated the effects of ethical and coaching-oriented leadership style, reported by raters, on perceived politics in PA reported by ratees.

## Results

QAL showed structural and convergent validity with the Authentic Leadership Questionnaire (ALQ; Gardner, Avolio, Luthans, May, & Walumbwa, 2005), to be used as predictor. Raters' ethical and coaching-oriented leadership style was associated with lower perceived politics in PA, even controlling for gender similarity and age.

## Limitations

The limitation is the small sample size of raters that prevented from using the more suitable random coefficient model approach. However, cross-level regressions conducted on 20 raters matched with their respective ratees support the same results obtained with dyads and suggest that leadership style can explain group variance in perceived politics.

## Research/Practical Implications

Findings suggest taking into account the rater-ratee relationship when implementing a PA system, and training leaders in acting as coach for their employees in order to improve the perceived fairness of the process.

## Originality/Value

We bridged two lines of investigation from HR and OB fields: the relational context of PA and organizational politics, and contributed to this literature by exploring a very specific domain in which political behaviors take place.

## Going one better: The additional benefits of impression management modesty over trait modesty in the workplace

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## Purpose

The present study aims at identifying the incremental effects of employees' impression management modesty (IM modesty) over trait modesty on supervisor ratings of employees'

likeability, perceived modesty, and job performance. Furthermore, the moderating role of employees' political skill is examined.

## Design/Methodology

Data from 238 employee – supervisor dyads were analyzed using multiple hierarchical regression analyses. Employees provided self-assessments of IM modesty, trait modesty, and political skill. Supervisors provided ratings of their employee's likeability, perceived trait modesty, and job performance.

## Results

As expected, employees' IM modesty positively predicted supervisors' likeability ratings above and beyond trait modesty. While IM modesty had no significant direct effect on supervisor ratings of perceived trait modesty, there was a significant interaction effect of IM modesty and political skill for male employees. Finally, there was a significant interaction effect of IM modesty and political skill on supervisor ratings of job performance.

## Limitations

The cross-sectional design of the study does not establish causality.

## Research/Practical Implications

Employee IM modesty demonstrated positive effects on supervisor affect without impairing perceived competence which underlines this IM tactic's considerable benefits for employees.

## Originality/Value

This is the first study to identify the incremental effects of IM modesty above and beyond trait modesty, thus further establishing IM modesty as an effective impression management tactic that is clearly distinguishable from the personality trait. Moreover, the moderating effects of employee political skill on the relationships between IM modesty and supervisor evaluations support and extend prior

research on the importance of social skill to successful impression management.

### **Modesty and gender: Implications of the “feminine” modesty effect for women at work**

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#### **Purpose**

A robust finding in social psychology research is that women under-represent their accomplishments to others whereas men consistently self-promote their successes. In two studies, this research investigated the effect of modesty on performance.

#### **Design/Methodology**

In study 1, active job seekers (n=81) participated in a videotaped mock interview. The interviews were coded for both self-promotion and modest behaviors. Senior managers were then asked to rate how likely they would be to hire each participant based on their interview performance. In study 2 the relationship between gender, modesty beliefs, and income was evaluated within a sample of unionized employees (n = 68).

#### **Results**

Across both studies, an interaction between modesty and gender was found. Women low on modesty achieved better outcomes than those who score high while men high to moderate in modesty are rated higher in an interview and earn a larger income than those who score low. Taken together these studies indicate that modesty leads to different achievement outcomes for men versus women.

#### **Limitations**

Future research should directly test the relationship between values and behaviors.

#### **Research/Practical Implications**

Modesty, both in terms of values and behaviors, has implications for organizational outcomes. These outcomes differ by gender and are predicted by socialized gender stereotypes. There are practical implications for career development. As well, these data provide another potential explanation for the persistent pay discrepancy between males and females.

#### **Originality/Value**

While self-promotion research has established itself within the organizational literature, modesty and its implications has been largely understudied. This work points to the importance of modesty as a predictor of career outcomes.

### **The effectiveness of the rules in performance management systems and organizational trust: An exploratory study**

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#### **Purpose**

This research studied the relationship between the effectiveness of the rules in performance management systems (PMS) and organizational trust, based upon the concept of Green Tape (DeHart-Davis, 2008) and Rousseau's definition of Organizational Trust (1999).

#### **Design/Methodology**

A mixed methodology was used, comprised of a qualitative study consisting of interviews to workers from organizations where a PMS is implemented, as well as a quantitative study, which was conducted in the same workplaces, and consisted of a PMS' Green Tape and Red Tape Evaluation Scale, and Organizational Trust (McAllister, 1995) and Willingness to Trust (Mayer & Gavin, 2005) Questionnaires.

## Results

Findings from the 113 questionnaires collected show a positive and significant correlation between the effectiveness of the rules and Organizational Trust (both Affective and Cognitive), as well as a mediating effect of Green Tape between Willingness to Trust and Affective Trust. The analysis from the qualitative data which stemmed from the 24 interviews made provides further supports these relationships and illustrates the impacts of ineffective PMS' rules on workers (i.e. diminishing motivation, low adherence to PMS).

## Limitations

Concerning limitations, the PMS' Green Tape scales were built from scratch, so they do not yet have extensive validation studies.

## Research/Practical Implications

The implementation of effective rules in PMS may reduce the found negative impacts. Further research may find further impacts of these rules.

## Originality/Value

To our knowledge this is the first research that assesses the organizational and personal impacts of inefficient PMS' rules, and, simultaneously, seeks to identify which such attributes could be improved in order to minimize said impacts.

## **The moderating role of organizational trust in the relationship between job satisfaction and organizational commitment**

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## Purpose

The focus is to study if the organizational trust moderates the relationship between job satisfaction and organizational commitment. We argue that there are certain condition that affect this relationship exists, and the strength

of the effect. Our chosen moderator is the level of organizational trust felt by employees and considered as interpersonal and impersonal trust. Thus, we present hypotheses for trust's moderating effect on the job satisfaction-commitment relationship, such that this relationship is stronger when employees feel that they trust a) colleagues, b) supervisors, and c) employer organization.

## Design/Methodology

Our empirical analysis is based on a survey of 714 respondents (response rate: 34.3) within two large Finnish corporations in the ICT and forest industries. We used LISREL software for the analysis. First, the measurement models were validated with CFA and then the hypothesized model was tested with SEM.

## Results

Our findings broadly support the hypothesized model. We argue that trust indeed moderates the relationship between satisfaction and commitment.

## Limitations

We collected data from only two industries, and only in the Finnish context. In addition, the current data was quantitative, and it should be complemented the data with qualitative interview data in the future.

## Research/Practical Implications

We have demonstrated that organizational trust plays a central role in facilitating conditions in which job satisfaction-commitment relationship flourish most effectively. Thus, recognizing and understanding the organizational trust as a part of the everyday life within organizations is important.

## Originality/Value

To the best of researchers' knowledge, this is the first attempt to study the moderating role of the trust between job satisfaction and commitment.



## A work-placed value clash and its impact on engagement, commitment and retention

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### Purpose

This research explores whether an employee can feel satisfied, in terms of engagement and commitment, in a workplace where their own drives and values do not align with that of the organisation.

### Design/Methodology

A survey questionnaire was sent to a recruitment organisation for employees to complete online (n=107). The survey had three sections;

- The first section gauged the personal drives of the employee; using the Talent Q measure; Drives
- The second section gauged the employee's perception of the organisational values
- The final section gauged the well-being of the individual

The hypothesis was that where there is incongruence between the employees' drives and how they perceive the organisations' values; the commitment and engagement levels will be low.

### Results

The research revealed that there is a significant negative correlation between the value-fit difference and wellbeing. Where the difference in values is high between the employee and how they perceive the organisation, the engagement and commitment levels are low.

### Limitations

It would be interesting to see if the same findings are apparent in other job sectors

### Research/Practical Implications

This research has implications for selection, retention, management, development and culture; all of which can be enhanced by ensuring values are aligned.

### Originality/Value

The importance of ability and personality in recruitment and development is well documented; however this project taps into the importance of drives values and suggests they too are of significant importance.

## Psychometric assessment as a tool to solve the problem of skills shortage

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### State of the art

Germany faces a shortage in experts, especially in the IT industry, the technical field such as robotics etc. The discussion about how to solve this problem shows numbers of options pointing in different directions. Major approaches are the renovation of technical training, marketing for girls in technical professions, employing old staff longer etc.

### New perspectives

An alternative approach to the skills shortage will be presented. The very restricted pre-selection procedures have to be replaced by procedures that are also open to candidates without all the exact skills requested to fill an opening. Instead of solely relying on existing expertise, psychological measures of potential (g) can identify candidates with the willingness and the prerequisites to acquire the relevant knowledge and to quickly grow into the expert role.

### Research/Practical Implications

Most answers to the skills shortage problem of the German industry leave open the question of prognostic validity or will have only long-term impact. The presented approach opens a quickly applicable perspective and solutions.

### High performance work system for creativity: Theoretical development and scale validation

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#### Purpose

Although much is known about the influence of the work context on creativity, there is only sparse research that has examined the role of human resource management (HRM) practices in promoting creativity. Additionally, only specific individual HRM practices for creativity have been examined such as training and rewards. Accordingly, the primary objective of this study is to develop a high performance work system (HPWS) for creativity scale and grounded in self determination theory examine the processes through which HPWS for creativity influences employee creativity. Specifically, this study posits HPWS as influencing employee creativity through need satisfaction which in turn, influences employee intrinsic motivation. We further posit creative process engagement as a moderator of the intrinsic motivation-creativity relationship.

#### Design/Methodology

The HPWS for creativity scale used in this study was developed as part of a PhD project. With the exception of employee creativity which was rated by supervisors (N=53), data on the study variables were obtained from 320 customer contact employees.

### Results

The hypotheses were tested using mediation moderation macro provided by Preacher, Rucker, & Hayes (2007). The findings revealed support for the hypothesized relationships.

### Limitations

Data were obtained from two companies in Lithuania thereby constraining the external validity of the findings.

### Research/Practical Implications

The findings suggest that HPWS for creativity scale can be considered an intervention strategy for enhancing employee creativity.

### Originality/Value

This study contributes to our understanding of the influence of human resource management practices by developing an HPWS for creativity scale and uncovering the processes linking HPWS for creativity and employee creativity.

### Too good to be true: Curvilinear relationships between high performance work systems, service climate and work outcomes

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#### Purpose

There has been growing interest in demonstrating that high-performance work systems (HPWS) contributes to firm performance; yet limited research attention has been paid in exploring the intermediate linkages between HPWS and performance. Further the limited research assumes that the relationships between HPWS and performance outcomes are often to be linear. In the current study, we took a Conservation of Resources (COR) theory-driven approach in systematically addressing this issue. We hypothesised HPWS and service climate at team-level to influence psy-

chological strain and presenteeism (as form of work outcome) at individual level.

#### Design/Methodology

83 teams (N = 830) participated from one multinational company. The project leader of each team provided for team level high performance work systems data; service climate aggregated at team-level. Multilevel analyses were conducted via SEM using Mplus.

#### Results

We found that under low strain, presenteeism is fairly constant, regardless of the level of service climate and use of HPWS. But when there is a high level of strain, presenteeism is low when there is a moderate level of service climate and moderate use of HPWS. If service climate and HPWS are very high, presenteeism rises. If service climate and HPWS are very low (strain is high), presenteeism is high.

#### Limitations

This study precludes any inference of causality due to its cross-sectional design.

#### Research/Practical Implications

The results imply that moderate levels of service climate and use of HPWS might be more beneficial for performance in high than low strain jobs.

#### Originality/Value

This study extends the COR theory by examining the curvilinear relationships between HPWS, climate and work outcomes.

### **The interplay between HRM content and process: Examining the moderating role of interactional justice in the relationship between HRM and employee outcomes**

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#### Purpose

While most studies in strategic human resource management (HRM) focus on HRM

content, recently the HRM process in organizations has received increasing attention; well-developed HR practices might not be enough to positively affect employees when not implemented well by managers. Based on justice and social exchange theories, we propose that interactional justice moderates the relationship between HRM and employee outcomes. As strategic HRM is supposed to enhance both employee performance and attachment to the company, both task performance and person-organization fit are examined as outcomes.

#### Design/Methodology

Our sample consisted of 49 managers and 247 employees of four large health care organizations. Managers rated HRM and task performance, and employees rated interactional justice and person-organization fit.

#### Results

Multilevel analyses showed that under conditions of high interactional justice, the relationships between HRM and both person-organization fit and task performance were positive, while for low interactional justice no significant relationship was found.

#### Limitations

The data were collected in the health care sector, which could limit generalizability, and no causality could be tested as data were cross-sectional.

#### Research/Practical Implications

Our results imply that both HRM content and process should be considered when examining whether and how HRM affects employees; when employees did not perceive just treatment from their manager, no positive relationship between HRM and outcomes was found.

#### Originality/Value

This study contributes to the literature by combining HRM content and process in one

model. Also, besides task performance, person-organization fit is examined as an outcome of HRM, which has rarely been done before despite its proven benefits for both organizations and employees.

### **Total rewards as antecedent of work engagement and intention to leave**

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#### **Purpose**

The goal of this study is to investigate the (relative) importance of nonfinancial reward satisfaction, compared to financial reward satisfaction, in driving employee engagement and intention to leave. Earlier research has demonstrated that both types of reward satisfaction can influence employee outcomes. This study, however, investigated both types of reward satisfaction in one equation. Based on self-determination theory, it is further argued that the effect of nonfinancial reward satisfaction will be the more important than that of financial reward satisfaction with regards to work engagement.

#### **Design/Methodology**

A cross-sectional survey design was used, with a large and diverse sample of employees (n=8357). CFA and SEM were used to evaluate the research questions.

#### **Results**

The results show that both financial and nonfinancial reward satisfaction had a positive effect on work engagement and a negative direct effect on intention to leave. Moreover, the effect of reward satisfaction on intention to leave was partially mediated by work engagement. Regression weights showed that nonfinancial reward satisfaction was a stronger predictor of the outcomes than financial reward satisfaction, supporting all hypotheses.

#### **Limitations**

This study uses cross-sectional survey data with single respondents, so an effect of common-method bias cannot be ruled out entirely (although some measures were taken to prevent it).

#### **Research/Practical Implications**

The study highlights the importance of taking a 'total rewards' perspective, including both financial and nonfinancial elements.

#### **Originality/Value**

To date, there is little research explicitly taking a 'total rewards' point of view and assessing the relative importance of financial and nonfinancial elements.

### **The strength of human resource management system: A validation of the model**

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#### **Purpose**

This research follows Bowen and Ostroff (2004) and intends to work on the validity of the HR system strength construct. We tested empirically this model in its original three features (distinctiveness, consistency and consensus) and added 3 dimensions: Utility, HR Performance and HR Relationship with the employees.

#### **Design/Methodology**

A survey study with data from 1290 employees, 82% employees and 18% managers within 21 organizations was used. We used exploratory factor analysis (EFA).

#### **Results**

EFA shows a favourable set of results. The results show a structure of five factors which explained 60% of the variance. The reliability analysis shows that all factors have Cronbach alpha values considered very good and the

items show good correlation with the total (> 30). Three of the five factors are attributes of distinctiveness and consistency (e.g. comprehensibility, visibility and instrumentality) and two are the added constructs (utility and HR Performance and relationship with employees).

#### Limitations

EFA was unable to support the hypothesis of the theoretical model of more than one attribute per variable. This lack of discriminant validity is also reported by (Gomes, et al, 2010) and its probably due to the high correlations among the attributes proposed by Bowen and Ostroff.

#### Research/Practical Implications

This study offers a scale validation and empirical work on the HRM System strength construct offering empirical support for some of the model's theoretic predictions.

#### Originality/Value

This study shows the importance of Utility and HR Relationship as an independent and important dimension in the employees perception of HRM.

### **Deals people make: The multifaceted relation between creative dialogues and (i-)deals**

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#### Purpose

I-deals are individualized agreements about job content and/or job conditions between supervisors and employees that satisfy both parties' needs (Rousseau, 2005). Earlier research showed that approximately 25% of the deals people make are i-deals. The purpose of this study is to provide insight in the dialogues between supervisors and employees and the

(i-)deals they make. We hypothesize that high-quality dialogues lead to higher agreement in supervisors' and employees' perceptions of the deals made, and to more agreements that make work more challenging.

#### Design/Methodology

Seventy-four supervisor-employee dyads were videotaped while having a formal conversation about job performance and development. Participants filled out questionnaires before and after their dialogue during a period of one year.

#### Results

Most (i-)deals that were made could be categorized as either comfort (i-)deals – that make work easier – or challenge (i-) deals –that make work more challenging. The type of (i-) deals being made appeared to be related to several specific employee and supervisor characteristics. The quality of the dialogue led to higher agreement about the (i-)deals that were made.

#### Limitations

As respondents voluntarily participated in our study, limitations are concerned with the generalizability of the results.

#### Research/Practical Implications

The results contribute to the improvement of the (i-)deal making process and suggest that more insight is needed in the content of deals and the dialogue skills of supervisors and employees.

#### Originality/Value

To our knowledge, this study is the first to provide insight in the process of (i-)deal making.

#### References

Rousseau, D.M. (2005). I-deals: Idiosyncratic deals employees bargain for themselves. New York: M. E. Sharpe.

### **Organizational support for development to retain employees: The role of the fulfilment of the psychological contract and career success**

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#### **Purpose**

Organizations in knowledge intensive industries struggle to retain employees. Support for development is often applied as a retention practice, but little is known about its effect. We assumed that effective retention efforts require that the organization fulfils its obligations towards the employee and the employee considers his/her career in the organization as successful. Due to its negative relationship to turnover, affective commitment was investigated as an indicator of effective retention efforts. We hypothesized that the relationship between organizational support for development and affective commitment is mediated by the fulfilment of the psychological contract and career success.

#### **Design/Methodology**

Data were collected from 961 knowledge workers in a company in the oil and gas industry. Multiple mediation was tested with the Process macro in SPSS (Hayes, 2012).

#### **Results**

Multiple mediation was established: The relationship between organizational support for development and affective commitment was mediated by the fulfilment of the psychological contract and career success.

#### **Limitations**

Limitations pertain to the use of cross-sectional data, common-method bias due to self-report data and potential problems in generalizability due to the focus on one industry.

#### **Research/Practical Implications**

The results imply that supporting development contributes to retain employees, given that the employees feel that the organization cares for them, met obligations and a career being two indicators for this.

#### **Originality/Value**

The study contributes to better understand the role of developmental support in retaining employees and its enhancing factors.

### **Managers on the both sides of psychological contract**

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#### **Purpose**

The aim of the research was to investigate group differences based on work status in psychological contracts' (PC) and the differences in managers PC as employees and as employer representatives.

#### **Design/Methodology**

The dimensional approach was used to measure perceptions of employee and employer obligations and differences between employment levels and between perspectives. Obligations in PC were measured on six employee obligations dimensions (eight scales) and on six employer obligation dimensions (eight scales).

Two surveys were conducted. Survey data was collected from 818 respondents who assessed the obligations from employee perspective and from 147 managers who assessed the obligations from employer perspective.

#### **Limitations**

First limitation is that this study assumes that managers are employer representatives. This was not empirically examined by asking managers whether they viewed themselves as representing the employer. A second limitation relates to the level of the relationship.



This study adopted a global view whereby managers were asked to assess the employer's psychological contract with employees in general.

#### Research/Practical Implications

Study results revealed the impact of position in organization to the strength of perceived employee and employer obligations. Managers own PC influence the evaluation of employer's PC with employees. The latter causes big differences in PC between lower-skilled workers, specialists and managers as employer representatives and as employees. This incongruence in PC has implications on employment relationships.

#### Originality/Value

Few works have measured managers perceptions of obligations from both perspectives: as employees and as representatives of the organization. In the two surveys the same questionnaire was used which permitted to compare employers' perceptions of obligations with employees' perceptions.

### **Psychological contract and occupational well-being: A profiling study among university employees**

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#### Purpose

This study identified the psychological contract (henceforth PC) classes, and examined how these classes were related to employee occupational well-being.

#### Design

The data was collected among 1197 employees in a Finnish university. The respondents were asked to evaluate their own and their employer's obligations included in their PC.

#### Results

The results of latent profile analyses indicated six latent PC classes labeled as follows: Class 1; strong mutual PC ( $n = 131$ ), Class 2; moderate mutual PC ( $n = 382$ ), Class 3; employer-dominant PC ( $n = 79$ ), Class 4; employee-dominant PC ( $n = 59$ ), Class 5; mutual transactional PC ( $n = 224$ ), and Class 6; mutual humanistic PC ( $n = 322$ ). According to ANCOVAs, the employees of Classes 1 and 2 experienced more vigor at work than the employees in Classes 4-5 and Classes 4-6, respectively. The employees in Classes 1 and 2 were also more committed to organization than the employees in Classes 3-6 and Classes 4-6, respectively. Moreover, the employees in Class 1 reported more work-family enrichment than the employees in Class 5. The employees in Class 5 also differed from the employees in Class 6 by reporting more psychological symptoms.

#### Limitations

The study was cross-sectional and based on one organizational sample.

#### Practical Implications

Employers and employees should create and value PC contracts that include various, mutual obligations between them, as such contracts may result in better well-being and more positive job attitudes among employees.

#### Originality

The profiles of PC and their well-being outcomes have not been studied earlier.

### **All i-deals are not equal: fairness perceptions and responses to i-deals**

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By individualizing the employment relationship according to workers' personal needs, idiosyncratic deals (or arrangements negotiated

ed between individuals and employers) indicate the value granted by the organization to individuals, but put individuals in a position where they might feel privileged in comparison to coworkers. Relying on these assumptions, we argue that there is a positive effect of i-deals on organization-based self esteem, positive emotions, and altruism. But we also argue that i-deals are negotiated in a more global context where employees can compare their treatment with that of coworkers (Rousseau, Ho and Greenberg, 2006). We explore three contextual variables that may alter the effects of i-deals on outcomes: perceptions of justice, fairness, and opportunities for others to negotiate i-deals.

We test hypotheses on a sample of engineers who graduated from a university located in the South of France. An online questionnaire was completed by 182 participants over two periods of time. We measured i-deals and moderators in period 1, and outcomes in period 2. Hypotheses were tested with the use of linear regressions, and were partially confirmed.

The main implication of our results is that when individuals feel they are not fairly rewarded, i-deals are less related to outcomes. This result highlights the challenge of developing perceptions of fair treatment when i-deals are provided to some employees and not to others. Given the limitations of our sample and of our research design, we encourage future research to further investigate contextual variables that may alter the impact of i-deals on outcomes.

### **What are you bringing to the table? Ideological currency, employee obligations and cohorts differences in the psychological contract.**

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#### **Purpose**

This paper contributes to the body of knowledge in three ways:

1. Using mental schema theory (Rousseau, 2001), the contribution of ideological currency to psychological contracts is explored
2. We test the mediating role of employee obligations on the relationship between employer obligations and work outcomes
3. We explore, using schema theory and cohort theory, if psychological contracts operate differently among three generational cohorts.

#### **Design/Methodology**

Survey data was collected in four service industries (N=900: hotels, tourism companies, financial services, facility management)

#### **Results**

Hypotheses were tested with SEM. Ideological contract was found to have a direct effect on employee extra-role obligations and affective commitment, and an indirect effect on extra-work effort. Moreover, employee obligations mediate the relationship between employee obligations and the above mentioned work outcomes. Finally, generational cohorts manifest differences in the way their psychological contracts operate.

#### **Limitations**

The study was cross-sectional, and research is needed to further disentangle career and generation effects.

#### **Research/Practical Implications**

Ideological contract can reduce operation of reciprocity between conventional employee and employer obligations. The mediating role of employee obligations supports reciprocity

and social exchange fundamentals of psychological contract theory. Finally, results indicate distinctly different psychological contract mechanisms for different generational cohorts in the workforce.

#### Originality/Value

This is one of the first studies to provide empirical evidence for the concept of the ideological contract and cohort differences in psychological contracts and provides support for an extension of psychological contract to include broader schemas that people bring to the employment relationship.

### Antecedents of training motivation

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#### Purpose

The paper presents studies investigating personal and organizational characteristics related to training motivation. Training motivation is understood as a goal realization process and explained using goal theories. The phases of the process of training undertaking are: goal evaluation, intention to undertake training, plan formulation, and actual training undertaking.

The research project focuses on the role of three sets of variables related to training motivation: 1) personality traits, defined according to the Big Five theory; 2) self-referent beliefs: self-efficacy, self-esteem, hope, and optimism; 3) organizational characteristics: organizational culture, work engagement, perceived social support from managers and coworkers.

#### Design/Methodology

Three studies are presented, investigating the relationships between these three groups of variables and the stages of the process of training undertaking. In each of the studies,

data from about 200 adults (aged 18-60) were collected.

#### Results

Structural equation modeling was applied to identify the important predictors of the stages of goal realization process – in this case, of training undertaking. Findings suggest that using personal and organizational characteristics we can to some degree predict motivation to training undertaking.

#### Limitations

The use of self-evaluations as measures.

#### Research/Practical Implications

Their research findings offer some suggestions for training needs analysis and trainings preparation.

#### Originality/Value

Lifelong learning is one of the sources of personal development and well-being. Despite the development of research, we still know little about motivation to undertake trainings and developmental activities. More research is needed to explain how and to what extent personal as well as organizational factors affect training motivation and action initiation and presented studies fulfill this gap.

### International relocation mobility readiness and its antecedents

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#### Purpose

International relocation for work reasons is associated with a high amount of uncertainty and challenging situations (e.g. adjusting to a new culture) that have to be mastered individually. While internationally operating organizations have increasing international relocation mobility demands, the willingness or readiness of today's employees to accept the

challenge to relocate internationally for work reasons remains constant or rather decreases.

Hence, the aim of the present study was to identify personal as well as social factors that determine international relocation mobility readiness and to suggest a reliable and valid scale to measure international relocation mobility readiness.

#### Design/Methodology

Data were gathered by an online survey distributed via social networks (N= 273 German employees).

#### Results

Hierarchical regression and SEM results indicate that attitudinal variables (protean career orientation), personality variables (uncertainty tolerance) as well as social norms (the perceived social endorsement of international relocation mobility) predict the highest amount of variance in the criterion international relocation mobility readiness. Further, international relocation mobility readiness was significantly and positively connected to international relocation mobility behavior.

#### Limitations

The sampling method applied limits the generalization of our results.

#### Research/Practical Implications

Results can be applied in personnel selection (e.g. for international careers) to find employees that are willing and able to master the uncertainty and stress associated with job-related international relocation. Thus, expatriate failure rates could be reduced.

#### Originality/Value

This is the first study that addressed personal as well as social antecedents of international relocation mobility readiness and tested a new scale to measure this readiness.

### **Relationship among energy activation strategies, work engagement, and job performance**

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#### Purpose

The purpose of the current research is to examine the relationship among energy activation strategies, work engagement and job performance. In our study, energy activation strategies are considered as a type of personal resource, and its possible outcomes are discussed. The role of energy activation strategies in the Job Demands-Resources (JD-R) model is also discussed.

#### Design/Methodology

The study adopted a cross-sectional design with self-administered questionnaire survey methodology. Data was collected from 180 staff of different levels selected from a transport corporation in Hong Kong. Correlation and multiple regression were used to test the hypotheses.

#### Results

The results show that (a) energy activation strategies were positively related to work engagement; (b) work engagement was positively related to job performance; (c) work engagement fully mediated the relationship between energy activation strategies and job performance.

#### Limitations

As the items of the scale measuring energy activation strategies were adapted from western studies, it may lower the generalizability of the findings to a Chinese cultural context. Nevertheless, this study allows an initial exploration.

#### Research/Practical Implications

The study extends the scope of literature in JD-R model by relating energy at work to mo-

tivational variables and job performance. The discussion of energy activation strategies also provides basis for individual intervention.

#### Originality/Value

Energy activation strategies could be a type of valuable resource that helps individuals to face heavy job demands. Nevertheless, little research has been done to investigate its nature and the possible outcomes. This is the first research study examining the function of energy activation strategies in a Chinese cultural context.

#### Effectiveness of skill development training program: A preliminary study

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#### Purpose

The purpose of this study is to investigate the effectiveness of a training program conducted on undergraduate students. At the inception of their carriers, new graduates are involved in training programs, provided by the companies. We suggest that our graduates, who have gone through most of these programs while studying, will have an advantage in competing with other applicants during recruitment. The training program aims to support students in achieving success in their academic lives and to prepare them for the professional work life. The program covers four topics which are goal setting and time management, interpersonal communication, public speaking and presentation skills, and stress management.

#### Design/Methodology

The sample is comprised of 347 students. Both at the beginning and at the end of the training they completed the questionnaires measuring above mentioned soft skills. There

is a three months time interval between pre-post assessments.

#### Results

Within-subject comparisons were used. The pre-post test assessment results demonstrate the effectiveness of the training program. In terms of time and stress management, goal setting and public speaking skills.

#### Limitations

During data collection period, there were limited number of students having similar workload so that it was difficult for the researchers to create a comparable control group.

#### Research/Practical Implications

This program aims students to gain the knowledge, skills and attitudes they will need after graduation

#### Originality/Value

The training program aims at easing the cost of companies' investment on training programs offered to graduates after being employed.

#### Evaluating informal learning support: Best practice from MIRROR - Reflective learning at work

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#### Purpose

In this contribution, we present the process of developing an evaluation framework to assess the effectiveness of informal learning support in five testbed organizations.

#### Design/Methodology

In the EU-project MIRROR we aim at supporting learning from daily work practice by means of reflective learning apps. We used the i\* technique (developed for modelling organizational environments and their information systems) to model reflective learning at work based on our Computer-Supported Reflective Learning Model. The resulting i\* model makes explicit the reflective learning process and related goals for individuals, teams, and the whole organisation within the five testbed organizations of MIRROR. We combined this with established (formal) evaluation models to specify final evaluation criteria.

### Results

The evaluation framework allows for assessing the impact of MIRROR's reflective learning apps in organizations: The final evaluation criteria cover the reflection process, reflection outcomes and work performance. Furthermore, we included criteria that are specific for organisational learning by reflection. The evaluation framework is currently applied in five test beds.

### Limitations

Our evaluation framework focuses on computer-supported reflective learning at work. However, our procedure of developing this framework is suited to evaluate other informal learning interventions.

### Research/Practical Implications

We shed light on the question of how to assess informal learning effectiveness on various levels (individuals, teams, and business level). We will give recommendations on how to use i\* modelling to derive specific evaluation criteria for concrete work contexts.

### Originality/Value

We describe how to integrate goal-based and theory-based evaluation approaches. This contribution should be of particular interest to those interested in evaluating informal learning support.

## Attrition in distance courses: influences from course and participants characteristics and from study context

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### Purpose

The present research aimed at proposing and testing a statistical model to predict the status of students in the end of e-learning courses. Investigated the influence of variables related to the Characteristics of the Distance Learning Course, the Student's Characteristics and Features of Student's Context, with the dependent variable being the Student's Situation at the End of the Course (approved/dropout).

### Design/Methodology

The research was conducted between August 2008 and August 2009 with employees who took a training course offered by Embrapa. Three questionnaires were developed and aimed at assessing the factors that facilitate or hinder the residence of students in distance learning courses. The final sample included 535 approved students, 48 dropouts and 43 non-identified. Logistic regression analysis (LR) were used to investigate the relation of variables.

### Results

The principal results strongly suggest that positive self-assessment of discipline and course interest and reactions toward the tutor's performance enhance the chances of the students completing the training. The students' ability to use the discussion tool, known as the "Forum", also increases their chances of completing the training, supporting studies that relate to the ability of students to use technology and the phenomenon of evasion.



**Limitations**

The small number of previous empirical studies to support the construction of the questionnaires can be scored as one of the limitations.

**Research/Practical Implications**

The findings corroborates with previous studies

**Originality/Value**

This study contributes to research the reasons why students drop out or persist in distance courses, proposes a research model with development and validation of questionnaires.

**Posters****Predictors of intentions and behavior to promote cultural diversity at work**

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**Purpose**

European workforces are culturally heterogeneous as never before. Many measures and research on cultural diversity promotion at work originate from the USA. This does not necessarily reflect the European context. As diversity management activities become more prominent it is important to understand psychological reactions to them to ensure success. This study investigated intentions and behavior to promote cultural diversity at work in a European context using Ajzen's theory of planned behavior (TPB).

**Design/Methodology**

Predictors of intentions to promote cultural diversity at work (NTime1=670) and actual behavior (NTime2=172) were assessed among Dutch managers/employees using a two-wave longitudinal survey design. Ethnicity, leader-

ship position, and the existence of a cultural diversity policy was also assessed.

**Results**

Intentions were positively related to attitude, perceived behavioral control (PBC) and ethnicity (minorities showing higher intentions). Employees in organizations with cultural diversity policies had more positive attitudes, experienced stronger subjective norms and had higher intentions than employees without such policies. Yet, PBC was equal among both groups, but higher among managers than among employees. Actual behavior, however, was not influenced by intentions or PBC.

**Limitations**

Predicting behavior to promote cultural diversity at work may be complex and also determined by other factors than the TPB-variables.

**Research/Practical Implications**

A cultural diversity policy positively influences intentions to promote cultural diversity at work. The gap between intentions and behavior suggests investigating an extended TPB-model.

**Originality/Value**

With an increasingly diverse workforce, this study adds to the understanding of psychological reactions to cultural diversity measures at work in a European context.

**Differences between Emiratis and Expatriates with respect to social exchange and work-related outcomes: Evidence from UAE**

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**Purpose**

We examined (1) the difference between expatriates and Emiratis (United Arab Emirates nationals) with respect to their work-related attitudes, such as intention to leave and or-

organisational commitment, and (2) the difference between expatriates and Emiratis with respect to their relationships with their peers and managers.

#### Design/Methodology

A questionnaire consisting of Leader-Member Exchange (LMX), Team-Member Exchange (TMX), intention to leave, and organisational commitment scales and several demographic variables was administered to 300 employees in various organisations in United Arab Emirates (UAE). ANOVA was used to explore the differences between expatriates and Emiratis with respect to work-related attitudes. In addition, structural equation modelling (SEM) was conducted to examine the associations among study variables.

#### Results

Results of ANOVA indicated that Emiratis have more organisational commitment than that of expatriates, and expatriates have higher intention to leave. SEM goodness of fit indices showed that the data fits the tested model well (Normed Chi-Square  $[X^2/df]=1.48$ ; RMSEA=.052; CFI=.920). Findings of SEM revealed that TMX and LMX had significant negative effects on intention to leave, and positive effects on organisational commitment ( $p<.001$ ).

#### Limitations

Findings of this study may not be truly representative of the entire working population since convenience and snowball sampling were employed.

#### Research/Practical Implications

Overall, the present study indicated that human resources management should pay greater attention to the process of nationalisation of work force and focus on facilitating TMX and LMX to reduce turnover and to increase organisational commitment.

#### Originality/Value

Given the high demand for the nationalisation of workforce in UAE (i.e. Emiratisation policy), and specific consequences of this, the topic is one of practical importance and theoretical interest.

### **How to increase awareness of diversity? Evaluation of four diversity interventions in the Dutch higher education sector**

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In response to demographic changes in the Netherlands, schools in the Dutch higher education sector increasingly aim to implement diversity policies and interventions to upsurge the representation of ethnic minorities in the work place. Scientific and practical scholars have pointed out that effectiveness of these kind of interventions do not only seem to be dependent on the extent to which minorities perceive the organization as attractive and inclusive to work at, but also requires support among the sitting majority members in the organization (e.g. Thomas & Plaut, 2008). The current study explores outcomes of different diversity interventions from both the minority and majority perspective in a relatively homogenous higher education organization (Windesheim University of Applied Sciences). Four interventions were developed and employed: 1) improving recruitment communication for minorities, 2) job shadowing for high potentials from an ethnic minority background, 3) mixed peer group meetings for new workers and 4) implementing sensitivity for diversity in leadership trainings. Based on document analyses and semi-structured interviews among all participants we found on the one hand that these interventions increased awareness among minorities of Windesheim as an organization that is open for differences. On the other hand, for majority members

these interventions increased awareness of which organizational strategies, policies and practices enhance or undermine benefits of diversity. More importantly, it increased intentions to actively involve diversity in organizational practices. These results underline the importance of involving all organizational members in implementing diversity policies.

### **Impression management, age diversity and stress: Exploring younger academics experiences in UK universities**

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#### **Purpose**

This study utilises impression management theory as a framework for understanding challenges and stress experiences of young academics, assessing both individual and organisational level impacts. The research objectives were: to explore younger academics' experiences of their roles focusing on challenges and satisfaction; to explore whether younger academics engage in impression management strategies and type of strategies used; and to assess the outcomes of engaging in impression management strategies and impacts on stress and well-being within a managing diversity framework.

#### **Design/Methodology**

A conceptual model was designed from a review of three distinct literature streams (impression management; younger age as a diversity demographic; and occupational stress). Qualitative exploratory semi-structured interviews were undertaken with 15 young academics under the age of thirty-five (operationalized by Archer, 2008)

#### **Results**

Evidence of numerous impression management activities were uncovered and links to their perceived effectiveness established. Emergent themes comprised: age discrimina-

tion; evidence of poor psychological health and stress experience; and individual differences in beliefs about biological age as determinants of engagement with impression management strategies.

#### **Limitations**

Quantitative data is needed to build on the findings and substantiate the nuances of the conceptual model.

#### **Research/Practical Implications**

The paper contributes to the debates about stress and well-being as a fairness and diversity agenda (Antounio et al, 2009) with the emphasis on age, and provides organisational level initiatives.

#### **Originality/Value**

This is a first step towards exploring the factors of importance when considering impression management within a managing diversity and equality framework.

### **In- and exclusion of ethnic minorities within HRM policies and practices**

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#### **Purpose**

The in- and exclusion of ethnic minorities (Zanoni & Janssens, 2007) at the workplace is highly relevant for management of working organizations and organizational psychology and strategic HRM scholars. To better understand the in- and exclusion (feelings of acceptance, having career opportunities, discrimination experiences) of ethnic minorities, sound empirical research is required. Yet, few studies have researched the relationship between HRM policies and practices (aiming at career development), and the experience of ethnic minorities concerning in- and exclusion processes. Only few authors (Zanoni & Janssens, 2007; Siebers, 2009) have explored

how minority employees struggle for recognition and positive engagement with their management, and how they create micro-emancipation.

#### Design

This paper explores, using three Dutch organizational case studies, how originally Turkish and Moroccan employees experience HRM policies and practices in general, and career development opportunities in particular.

#### Results

Interview data will show how these ethnic minorities experience processes of in- and exclusion within such HRM policies, and how they gain micro-emancipation in their career development.

#### Limitations/recommendations for future research

To be able to generalize across the Dutch business context, we recommend quantitative research amongst more Dutch companies.

#### Practical implications

Our results may be used by HR managers to tailor their policies and practices concerning ethnic minorities.

#### Originality/value

Empirical data regarding the experiences of ethnic minorities regarding HR policies, particularly pertaining to career development, hardly exists, and is of great value for practitioners.

### **Target-group-oriented gender trainings - an innovative way to ensure sustainable gender awareness in organizations. Results from the cooperative research project "GENDER MAINStreAMing (GEMAINSAM) - Veränderungen erreichen"**

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#### Purpose

Gender equality efforts in working life are indeed progressing; however the goals of the so-called Gender Mainstreaming are not yet accomplished. The many approaches conducted so far in education and business have made their contribution, but are limited in range and acceptance.

#### Design/Methodology

The cooperative research project GEMAINSAM (funded by the Federal Ministry of Education and Research, the European Social Fund and the EU) provides an innovative solution statement for this problem by providing target-group-oriented, adaptive gender equality approaches. With reference to a dynamic-transactional perspective (Mischel, 2004) and the Capability Approach (Nussbaum, 2006), an instrument for the measurement of the gender awareness in organizations is developed and tested in various economic, social, public and academic organizations for this purpose (n=1300). Prototypical groups are derived from the determined individual gender awareness status and form the basis for the development, application and evaluation of target-group-oriented approaches to increase the gender awareness.

#### Research/Practical Implications

##### Originality/Value

Besides from the presentation of the results of this comprehensive survey, first innovative target-group-oriented approaches to increase the gender awareness in organizations will be introduced in this Scientist-Practitioner Paper.

### **Interactive relations between generations, supervisor incivility, and job context on work outcomes**

***Nominated for the EAWOP Congress 2013 Best Poster Award***

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#### Purpose

Leiter, Price, & Laschinger (2010) investigated generational differences in relations between workplace incivility and outcomes on nurses in Canada, and found that Gen Xers experienced more burnout and workplace incivility relative to Boomers. We extend this theory by investigating moderating roles of supervisor incivility and job context, including both job demands and job autonomy, in the relations between generational differences (GenX vs. Boomers) and work outcomes, including: Subjective and objective stress indicators, job satisfaction, organizational pride, income, and intentions to quit.

#### Design/Methodology

A subset of N=476 observations from the archival 2006 General Social Survey (GSS; Smith, Marsden, Hout, & Kim, 2011) was utilized. All measures except generation were measured via self-report, and were cross-sectional. Educational level was included as a covariate.

#### Results

Relative to Baby Boomers, when both supervisor civility and job autonomy were low, Gen Xers reported the least job satisfaction and the greatest intentions to quit; GenXers also reported less income than Boomers when supervisor civility was low, and vice versa. Relative to Gen Xers, when both supervisor civility and job demands were high, Boomers reported the greatest levels of job satisfaction and organizational pride.

#### Limitations

Strong causal inferences cannot be made because of the cross-sectional nature of the study design.

#### Research/Practical Implications

Evidence of the posited relations may necessitate continued investigation into the interplay

between work context and process on generational differences.

#### Originality/Value

This study represents a first attempt to understand the interactive relations between generational differences, job context, and workplace incivility on work outcomes.

### **How long will I stay and how many opportunities will I have in my work life? Stability of occupational future time perspective and its relationship with general time perspective**

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#### Purpose

Many time perspective scales have been developed up to now. However, one-dimensional time perspective measures have been criticized. Therefore, current research focuses on multi-dimensional measures. The current study deals with two time perspective scales, namely (1) occupational future time perspective (OFTP; subscales remaining time, remaining opportunities; Zacher & Frese, 2009) and (2) Zimbardo time perspective inventory (ZTPI; subscales future, past-negative, present-fatalistic; Zimbardo & Boyd, 1999).

#### Design/Methodology

To test the stability of OFTP and its correlation with ZTPI, we conducted a longitudinal study with four measurements of OFTP across two years and one measurement of ZTPI.

#### Results

The subscales of OFTP correlate highly over measurement points and are therefore stable over time. Furthermore, subscales of ZTPI correlated with subscales of OFTP such that future orientation was related to remaining time, whereas a negative view of one's past was associated with lower scores for remaining opportunities.

### Limitations

Replication with longer measurement time lags and investigation of all subscales of ZTPI are required. Furthermore, cultural differences concerning the perception of one's past, present, and future may affect the perception of remaining time and opportunities.

### Research/Practical Implications

Knowing when and why our perceptions of remaining time and opportunities shift from unlimited to limited supports research to attenuate negative work-related effects of this shift.

### Originality/Value

To our knowledge, this study is the first to analyze the stability of OFTP over time. The results indicate that people's perceptions of remaining time and opportunities at work change slowly.

## **The perception of sexual harassment: A comparative study**

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### Purpose

The purpose of this paper is to present the results and conclusions drawn from a comparative study about behaviors that can be classified as sexual harassment at the workplace.

### Design/Methodology

This study was conducted at the University of the Balearic Islands (Spain) in 1996 (n = 897) and has been replicated recently in 2011 (n = 1521) at the same university. This comparison allows us to investigate changes over time in the perception of behaviors that are considered sexual harassment.

### Results

The results show that the perception of items classified as "sexual harassment" increases,

the perception of the items considered "other crimes" remains the same, the perception of items classified as "rude behavior" descends and perception of the items identified as "normal behavior" has fluctuations in both directions.

### Limitations

The nature of the study and its focus on Spanish university students may limit the generalizability of the findings across other work environments or regions.

### Research/Practical Implications

The results underscore the need to implement specific measures to prevent and eliminate sexual harassment at universities such as other workplaces -taking into consideration their common characteristics- in order to get at the forefront of a real policy of equal opportunities.

### Originality/Value

This paper addresses the numerous calls for the definition of sexual harassment and associated behaviors.

To our knowledge, this is the first study in Spain that compares the perception of behaviors that can be classified as sexual harassment in university students in two different time points.

## **Interest differences in HR: A science-practitioner gap for the center - A double gap for the periphery**

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### Purpose

There is an ongoing debate about the science-practitioner gap in the field of human resources (HR). Furthermore, several authors have complained about the low visibility of science from peripheral countries (i.e. Non-Western countries). The goal of this study was



therefore to update previous work of Deadrick and Gibson (2007, 2009) who demonstrated that HR academics and practitioners are interested in different HR issues and to extend it by analyzing HR journals from the center and the periphery.

#### Design/Methodology

We content analyzed scientific HR journals from the US ("Journal of Applied Psychology" and "Personnel Psychology") and India ("Management & Labour Studies", "Indian Journal of Industrial Relations" and "Vision") as well as HR practitioner journals from the US ("HR Magazine") and India ("Human Capital"). In total, 1964 articles were coded by two raters according to their primary topic.

#### Results

Not only did we identify interest area gaps between scientists and practitioners, but also between the center and the periphery. For example, Indian authors were particularly interested in strategic HR and HR development issues.

#### Limitations

The results regarding the periphery are limited to India and should be replicated with journals from other peripheral countries.

#### Research/Practical Implications

These results imply that scientists from the periphery are confronted with a double gap: one regarding the center of science and the other towards local practitioners.

#### Originality/Value

The study shows that the science-practitioner gap in HR is a global phenomenon, and it extends the existing research by adding the perspective of periphery researchers.

### **Relationships between personality and task and citizenship performance in clerical jobs**

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#### Purpose

Previous studies have shown significant relationships between personality and job performance. Nevertheless, the influence of personality factors is moderated by the type of performance. Specifically, personality seems to be a stronger predictor of citizenship performance in comparison to task performance.

Regarding citizenship performance, a stronger relation has been found for conscientiousness, followed by extraversion. However, the influence of other personality factors could vary depending on the type of job. Thus, agreeableness is relevant in jobs requiring high levels of social interaction (e.g., Barrick, Judge & Mount, 2000).

The aim of this paper is to analyse the relationships between task and citizenship performance with the factors within Five Factor Model: neuroticism, extraversion, openness to experience, agreeableness and conscientiousness.

#### Design/Methodology

Personnel from public organizations have completed on-line a battery of the following instruments:

- (a) Personality: NEO-FFI of Costa y McCrae(1989, 1992).
- (b) Citizenship performance: Spanish adaptation Coleman and Borman's (2000) scale.
- (c) Task performance: Job specific questionnaire developed from a job analysis.

### Results

The relationships between personality and job performance have been analyzed through correlations.

### Research/Practical Implications

In our opinion, this research would lead to advances in the knowledge of relationships between personality and both types of performance. Moreover, the results are important for understanding the role of each personality factor in predicting performance within a specific occupational group: administrative workers from public organizations with social interaction demands with users.

*This study is framed within the project, PSI2010-17327, financed by the National Program of Fundamental Research Projects of the Ministry of Science and Innovation of the Government of Spain (MICINN).*

### **Prevention- vs promotion-oriented proactive behaviors and organizational socialization process: The dark side of new-comer proactivity**

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### Purpose

Within the interactionist perspective (Griffin et al., 2000), the role of proactive behavior (PB) is one of the main topic in organizational socialization (OS) research (Bauer et al., 2007). However few research is known about the type of PB-orientation on OS. According to Spsychala & Sonnentag's approach (2011), we argue that PB has not an "in se" positive impact on newcomer's OS: our hypothesis aim to demonstrate that promotion-oriented PB (ProOrPB) is more effective in OS accommodation phase (Feldman, 1977) than prevention-oriented PB (PreOrPB).

### Design/Methodology

Design: cross-sectional, multi-center. (longitudinal design in 2013).

Sample: 213 hospital-nurses within 5-years after hiring.

Data collection: web- and paper-survey.

### Results

Hypothesis are supported: ProOrPB showed a strongest correlation than PreOrPB on OS (0.55 vs 0.39 in the SEM model), the model had optimal fit-indexes. If the new-comer engages active initiatives at work instead of reactive behaviors, OS process is enhanced.

### Limitations

A longitudinal design is planned to confirm these results (coming in 2013).

### Research/Practical Implications

This is one of the first studies that explores the type of PB over OS, ProOrPB has to be encouraged by supervisors in order to improve OS. However is necessary to consider the role of ProOrPB in enhancing task conflicts (Spsychala & Sonnentag, 2011) in order to find a balance point between the need for adjustment and the need to reduce task conflicts in the team.

### Originality/Value

The type of PB impacts differently on OS process: promotion-oriented PB, while enhances task conflicts, has an opposite role in improving newcomer OS. These findings open new perspectives in organizational socialization research.

### **Exploring the psychological processes that link organization-assigned talent categories with job satisfaction and work effort: The role of distributive and procedural justice**

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#### Purpose

Understanding differential reactions to exclusive talent management / workforce differentiation by different talent categories (talents and non-talents) by exploring the mediating impact of employees' feelings of fairness.

#### Design/Methodology

A questionnaire was distributed within one multinational company among employees who were (N=190) and employees who were not identified as talents (N=300).

#### Results

The results indicated that perceptions of distributive justice were significantly higher for employees identified than for employees not identified as talents. Moreover, these feelings of distributive justice fully mediated the relationship between talent categories and job satisfaction. The results also revealed that perceptions of procedural justice moderated the relationship between perceived distributive justice and work effort.

#### Limitations

In future research a longitudinal study could give more insights on the causality of the relationships.

#### Research Implications/Originality/Value

In line with Björkman (in press) and Marescaux et al. (2011), we found that work outcomes were indeed affected by the way people experience or perceive workforce differentiation. Moreover, we extended their research by looking into the objective antecedents (i.e., organization-assigned talent categories) of these subjective perceptions. In that way, this is one of the few studies that helped to bridge the divide between actual (i.e., organization-assigned talent categories) and perceived talent management practices (i.e., perceived distributive and procedural

justice of talent management practices) (Wright & Nishii, 2004).

#### Practical Implications

An important practical implication is that organizations should focus on procedural justice as it enhances the work effort of talents.

### **Horizontal and vertical career success specifics in Russia**

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#### Purpose

A subject of a recent research career success was to examine career in its' connection with organizational culture and vocational self-concept components.

#### Design/Methodology

The methods included career success questionnaire (implying self-assessment and expert assessment), "Attitude towards career" questionnaire (Rikel, Tikhomandritskaya); self-efficacy test, career-orientation test, the Kuhn-McPartland test; MIPI Professional Identity test; OCS Organizational Culture test. The research involved employees (N=125) working in 4 organizations.

#### Results

There were revealed two significant factors which were named horizontal and vertical career orientation, and that correlated with different scales of career success ratings, vocational self-concept components and organizational culture profiles. These career orientations signify personal orientation towards financial and positional career growth (vertical career) and professional growth and business communication achievements (horizontal career). In this respect our respondents stated that vertical career should be considered as a goal for the future career development, while actual success criteria for them is professional-

ism ('horizontal' career standards). The self-assessment and external assessment ratings of success in positional and financial growth interconnect with the importance of professionalism as a part of vocational self-concept, which means that success assessment inside the organization comes from compliance of one's vocational self-concept to the horizontal career orientation.

#### Limitations

But it remains to be tested how much our results can be different in cross-cultural research.

#### Research/Practical Implications

This results can be used in organizational and career consulting programs.

#### Originality/Value

To our knowledge, the study is one of the first to analyze career as an integrated product of complex organizational and personal factors.

### **Organizational career management in the "new career" era: Characteristics and outcomes**

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#### Purpose

To develop and test a model of the characteristics and effectiveness of organizational career management.

#### Design/Methodology

A survey was conducted in which the HR-managers or general managers of 782 organizations located in Belgium, participated. Questions addressed organizational strategy and career management goals and approach. Data were matched with company characteristics, company-level data on employee turnover, absenteeism and organizational performance. Using Qualitative Comparative Analysis, configurations of factors will be detected which

together are necessary and sufficient conditions for attaining organizational and HR-outcomes (Fiss, 2007; 2011).

#### Results

Preliminary results suggest that the need for realizing organizational continuity is a determining factor of the career management approach that is being taken by the organization. The QCA analyses are currently being conducted, during the presentation we will present and discuss the configurations of factors leading to organizational and HR-outcomes found.

#### Limitations

The data collected only include organizational-level data, with only one respondent per organization.

#### Research/Practical Implications

The findings will be interpreted in light of the theories on career management. For practice, they provide insights into how organizations can use career management to realize desired organizational outcomes.

#### Originality/Value

This study contributes to the careers literature by furthering our insights into the organizational approach to careers, a perspective that is largely being neglected given the strong emphasis on individual agency in the careers literature. Moreover, the large dataset together with the QCA approach provide a methodological contribution.

### **Student sense of coherence, study engagement and self-efficacy in relation to their study and employability satisfaction**

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#### Purpose

The purpose of the study was to explore whether students' sense of coherence (meas-

ured by the Orientation to Life Questionnaire), study engagement (measured by an adapted version of the Utrecht Work Engagement Scale) and self-efficacy (measured by the Self-Efficacy Scale) significantly related to their satisfaction with their current studies and their employability satisfaction (measured by two single item scales).

#### Design/Methodology

A convenience sample of 127 employed adults in the establishment phase of their careers enrolled for third year level undergraduate studies in the Industrial and Organisational Psychology at a higher education distance learning institution participated in the study. A quantitative survey approach was followed, collecting primary data.

#### Result

Correlational and standard multiple regression analyses revealed significant associations between the participants' sense of meaningfulness and study engagement and their satisfaction with their current studies and employability.

#### Limitations

The participants' self-efficacy did not relate significantly to their satisfaction with their current studies and employability

#### Research/Practical Implications

Students felt that their lives (and their studies) made sense on an emotional and not just cognitive level, and that the demands of their lives and studies were worthy of commitment. Also having a sense of the significance of one's studies, a sense of personal efficacy, feeling enthusiastic and inspired, taking pride in one's studies and viewing it as challenge, significantly increased their study and employability satisfaction.

#### Originality/Value

The findings contributed new knowledge that could be used to inform the design of teaching

and assessment activities in the distance learning context.

### **Talent management – A case study of geothermal development company (GDC)**

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#### Purpose

The purpose of this paper is to examine the steps GDC is taking towards managing the Company's skilled talent.

#### Design/Methodology

I examined the HR's strategic activities as a source of secondary data, which are geared towards managing GDC's talent. HR has identified losing the Company's talent as one of its risks.

#### Results

GDC has initiated the following eleven strategic objectives to manage the Company's talent: employee engagement, recruitment, integrated technology, talent mapping, motivation strategy, training and education, quality policy, benchmarking, measurement, communication and talent mobility strategies. HR professionals are determined to helping employees plan and manage their careers. GDC is focusing on treating people as individuals and addressing their strengths, weaknesses, and work and life goals due to their enormous impact on people's attitudes towards their work. This, in turn, may translate into stronger performance and higher retention.

#### Limitations

GDC, a three year old Company, requires more time to notice the effectiveness of the strategies. Talent management is a long term strategy that has just kicked off and the results might be realised in about five years if well-managed.

**Research/Practical Implications**

From talent mapping and planning to performance evaluation, GDC's HR professionals need to constantly evaluate and seek new ways to streamline, integrate and align HR functions with broader corporate objectives in order to manage the talent.

**Originality/Value**

To my knowledge, the study is the first to examine the steps GDC is taking to manage the Company's talent in the growing skill-oriented market.

### **The measurement of HR practices: Comparing survey items**

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**Purpose**

Central to HRM research is the link between HR practices and outcomes. While scholars frequently use surveys to assess HR practices, there is no agreement regarding the appropriate source of data collection (employees versus managers). Also, items vary considerably in nature (factual versus evaluative). The current study therefore compares a range of HR practice items that differ on these aspects in order to learn how these different measures interrelate, and whether it affects findings of studies.

**Design/Methodology**

Data on a wide range of HR practice items is collected based on a sample of 70 line-managers in different organizations and 250 of their employees.

**Results**

Preliminary findings suggest that correlations between measures of presence and coverage when rated by the same type of respondent are high, suggesting redundancy of coverage measures. Moderate correlations are found

when different raters are used. When comparing factual and evaluative items substantially lower correlations are found.

**Limitations**

Although this study is among the first to compare HR practice items, other dimensions in terms of which items differ should be studied also.

**Research/Practical Implications**

The findings of this study suggest that the type of measure used to assess HR practices matters. This has implications for discussions about the meaning and measurement of the concept and highlights the need for researchers to carefully consider the types of items used in studies.

**Originality/Value**

This study provides first insights in the extent to which different measures overlap which is important in order to be able to compare studies and build a cumulative body of knowledge on the HR-outcomes link.

### **Tutorials in upper grades of engineering school in the national university of Mar del Plata (Argentina): An exploratory study**

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Graciela Filippi (Univ. of Buenos Aires, AR)*

**Purpose**

The aim of this study was to present to the scientific community the first stage of an intervention that took place in the School of Engineering of the National University of Mar del Plata (UNMDP) with the purpose to get to know how the tutorials are lived, thought and developed in the upper grades of the School of Engineering. Chiva Sancho & Ramos Santana (2007), discussed the importance of de-



signing a Tutorial Action Plan with specific teaching methodology.

#### Methodology

Data have been gathered in a sample of tutors (N = 47) involved in tutorials. Have been developed individual and group interviews to them, which have been analyzed through a qualitative methodology.

#### Results

Tutors' perceptions were found out to be positively related to own qualification and to their active role as tutors involved in the tutorials.

#### Limitations

Limitations of the study were linked to the sampling procedure which was a convenience one and with the different measures used.

#### Research/Practical Implications

The tutorials system started in 2004 and it is actually being revised. This system is still limited, since further efforts can be devoted to the generalizability of the survey, by including contextual variables related to the geographical environment and to different academic contexts.

#### Originality/Value

This study contributed to investigate the tutorials thesis developed in the Specialization in Organizational and Work Psychology (University of Buenos Aires).

### **Career counseling in the XXIst century: New perspectives and empirical evidence of intervention effectiveness**

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#### Purpose

This work maps the way forward and addresses the question regarding the effectiveness of qualitative interventions from the perspective of Life Designing for the XXIst century. In particular this contribution show the results of

four studies for evaluating the effectiveness of the Career Construction Interview, the Career Interest Profile, the Career Construction Genogram, the Career Future Autobiography.

#### Design/Methodology

The effectiveness of the interventions was evaluated using a pre- and post-experimental design with a control group through a quantitative mode of inquiry.

#### Results

The results of the studies showed that the qualitative interventions were effective for career counseling in the perspective of Life Designing.

#### Limitations

The main limitation of the studies is the smallness of the sample that could effect the generalizability of the results.

#### Research/Practical Implications

The results could have been strengthened by using a sample more widely representative of the Italian situation and by making comparisons with similar samples in other countries. The evaluated interventions can be used to good effect by professionals in the XXIst century to help clients tell their stories and identify their life career themes during career intervention in a career construction perspective.

#### Originality/Value

The interventions appear to be valuable strategies for developing awareness of one's Self through a process of construction and reconstruction with the use of narrative in a storied approach.

### **Age stereotypes in organizations – One dimension or more?**

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### Purpose

Age stereotypes in the work context have received increasing attention in the past years, especially after the systematization by Posthuma and Campion (2009). They postulated six clusters of age stereotypes after reviewing the literature on the subject. The present paper tests if these clusters are represented by the same number of dimensions.

### Design/Methodology

To test the dimensionality of older worker stereotypes perceived to be held within a specific organization (psychological age climate) we sampled N=258 employees of three residential building cooperatives in Germany. Participants' age ranged from 18 to 64. Additionally, we investigated relationships with different aspects of employability.

### Results

Exploratory and confirmatory factor analyses using SPSS and Mplus suggest a two-factor structure with adjectives describing positive attributes usually assigned to older workers (dependable, experienced) loading on one factor and positive attributes usually assigned to younger workers (able to learn, productive, open to change) loading on the second. Negative relationships between the second factor but not the first and career self-management suggest a meaningful separation into two factors.

### Limitations

It remains to be tested if the same factor structure would occur in different industries. The relationship with career self-management should be confirmed by using a longitudinal design.

### Research/Practical Implications

These results imply that age stereotypes in organizations might have a much simpler structure than commonly assumed. This could result in less complex, shorter and thus more economic measures of age stereotypes in

work context, than the ones currently available.

### Originality/Value

To our knowledge, the study is the first to systematically test the dimensionality of age stereotypes in organizations.

### **Doctoral student's professional identity: the model of psychological, social and environmental factors**

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### Purpose

Professional identity is an essential condition of successful career and, according to Austin and McDaniels (2006), developing an identity as a professional scholar is an essential task for doctoral student. However, doctoral students may experience difficulties because they are faced with multiple identities: student, researcher, teacher, service provider (e.g. psychologist), etc. Building on the general conception of Systems theory, as well as Super's career development and Social identity theories, we constructed the theoretical model of factors influencing the professional identity of doctoral student. Thus, the objective is to present a model that explains the psychological, social and environmental factors of doctoral student's multidimensional professional identity expression.

### Design/Methodology

The instrument to measure doctoral student's multidimensional professional identity was created and used. Psychological factors involved personality traits and thinking styles; social factors included social support from advisor, colleagues, employer and family; factors of academic environment involved study program context and work conditions.

### Results

Empirically tested theoretical model of psychological, social and environmental factors influencing the multidimensional professional identity of doctoral student is presented. Currently, the present study is in data collection stage. The results of the analysis will be presented.

### Limitations

The model is new and discussions with scientists are desirable.

### Research/Practical Implications

The results may be useful for doctoral students' education, research productivity, career monitoring and management.

### Originality/Value

The present study will contribute to improved understanding of doctoral student's professional identity. To our knowledge, this study is the first, which attempts to look comprehensively at various factors of doctoral student's multidimensional professional identity expression.

### **Psychological criteria of estimation of sellers' professional competence**

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### Purpose

This study deals with the most demanded personnel on a labor market. The research timeliness is defined by practice necessity of high-quality selection of the personnel which is the major link in realization of product that made organization.

The aim of this study (with M.M. Alekseeva) was to find key sellers' professional competences in trading network of the mobile goods and services.

### Design/Methodology

Our sample consisted of 119 sellers, who filled out questionnaires that detected features of: 1) self-conception, 2) motivation, 3) personality traits, 4) subjective image of successful work. Net Promoters Score (NPS) offered F. Reichheld (2006) has been chosen as a competence indicator.

### Results

The correlation analysis of NPS with particular psychological indicators has shown that level of high service quality is connected with responsiveness, trustfulness, agreeableness. Successful workers differ (Manny-Whitney U-test) from unsuccessful by more trustfulness ( $p=0,022$ ), agreeableness ( $p=0,024$ ), anxiety ( $p=0,031$ ) and an orientation on action ( $p=0,091$ ). Results of the factor analysis supported differentiations between sellers: the most competent sellers ( $N=28$ ) are characterized by two psychological criteria: «client orientation» and «action orientation» connected with NPS.

### Limitations

It is necessary to notice that standardization of estimation procedures assume their adaptation to business problems, the account of organization requirements, conformity of professionals and the organization.

### Research/Practical Implications

Practical value of this study consists in investigation of particular indicators of sellers' key competences and in making clear why some candidates are more successful in sales.

### Originality/Value

We discuss the practical implications of our results in terms of how best to support high-quality selection of the sales managers.

### **Development of a computer based task performance scale for clerical workers in a public administration**

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#### Purpose

Work performance can be decomposed in two main components, task and contextual performance. Following Borman and Motowidlo (1993), task performance can be defined as the proficiency with which incumbents perform activities that are formally recognized as part of their jobs. There are several ways to address task performance appraisal. Viswesvaran and Ones (2000) pose a framework for reviewing models of job performance that classify these into categories depending on their developmental context and on their occupational focus. The purpose of this research was to develop a scales to measure specific tasks representative of a job family.

#### Design/Methodology

Departing from job analyses using a Spanish adaptation of the PAQ and task inventories, several jobs in a Public Administration Unit were clustered in job families. One of these families included clerical jobs: administratives, administrative assistants, assistants, etc. Incumbents (N=135) declared to share 14 tasks (each of these tasks were performed by at least 75% of incumbents).

Each of these tasks was presented to a new set of administratives using a computer based system in a way that tried to minimize halo effect and to force participants to read the whole item, making it difficult to tag extreme scores.

#### Results

Distribution properties will be discussed and compared with traditional graphic scales and validity and reliability of this scale will be presented.

#### Research/Practical Implications

This research is innovative in the procedure implemented to find core job family tasks and on the other hand, in the new way of presenting items. Therefore a new computer based item type is presented and tested.

#### **Relational perspective of meaning in life at retirement: A qualitative study**

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#### Purpose

We present a new perspective, which integrates current literature on transition to retirement with the relational perspective of working in career development and the literature of meaning in life. Our aim was to enhance our understanding of the role relationships play in finding meaning in life after the transition to retirement.

#### Design/Methodology

We undertook semi-structured interviews with 15 seniors aged 55 to 65, before their retirement. The interviews focused on how social relationships shape seniors' construction of meaning in life in their foreseen retirement transition. We analyzed data with a content analysis.

#### Results

Most of those interviewed suggested that freedom would be the most important aspect of their new life as retirees and that they have one big retirement project, such as moving to a new apartment. When asked about meaning of life, the majority commented that they would find meaning in helping others, such as taking care of grandchildren and/or volunteering for a social purpose.

### Limitations

The current investigation was limited by the convenience sample and by the small sample size.

### Practical Implications

Career counseling with seniors should be further developed in Europe, as difficulties dealing with retirement and finding (new) meaning in life emerge for many retirees and pre-retirees.

### Originality/Value

This study proposes to link three different areas of research in a single perspective: transition to retirement, career development with the relational perspective of working, and eudemonic well-being in terms of meaning in life.

### **Career decision-making difficulties and individual differences: The role of emotional intelligence to strength the career choice process**

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### Purpose

This study aimed to verify the existence of incremental validity of emotional intelligence with respect to personality, career decision-making self-efficacy and perceived social support in relation to career decision-making difficulties.

### Design/Methodology

The Big Five Questionnaire (BFQ), the Career Decision Self-Efficacy Scale - Short Form (CDSES-SF), the Multidimensional Scale of Perceived Social Support (MSPSS), the Bar-On Emotional Quotient Inventory (Bar-On EQ-i) and the Career Decision-making Difficulties Questionnaire (CDDQ) were administered to 327 Italian university students. Pearson's *r* correlations and hierarchical regressions were carried out.

### Results

The results demonstrated the influence exercised by personality, career decision-making self-efficacy, perceived social support, and emotional intelligence on career decision-making difficulties, underlining the role of emotional intelligence.

### Limitations

The impossibility of generalizing the results and the exclusive use of self-report measures.

### Research/Practical Implications

It would be interesting to replicate the study on samples more widely representative of the Italian situation and on different samples (e.g. workers). It would be useful to administer along with the self-report measures other instruments to assess ability-based emotional intelligence. The implications for career decision-making difficulties interventions are related to: emotional education (primary prevention); screening (secondary prevention) for early specific training on emotional intelligence; at a career counseling level (tertiary prevention) identification of clients who could benefit from specific work on their emotional reactions to different career decision-making difficulties.

### Originality/Value

Since emotional intelligence is a variable that can be improved, the study of relationships between emotional intelligence and career decision-making difficulties can delineate new areas of future research and intervention.

### **Evaluation of effectiveness of a guidance intervention (ACARISS Program) in the field of science for the promotion of talents**

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### Purpose

This study is part of the ACARISS Program promoted in Italy by the Region of Tuscany with the aim of bringing together the school and the research laboratory, developing innovative approaches for improving learning of the scientific disciplines. The objective of the present study is to contribute to enhancing educational and career choice in the scientific field.

### Design/Methodology

The present work evaluates the effectiveness of intervention using a pre- and post-experimental design with a control group. In the experimental group, prior to intervention (T1) the students' attitudes towards science were investigated. Moreover, career decision-making difficulties and career decision-making self-efficacy were evaluated. These variables were measured again following the intervention (T2).

### Results

The results showed the effectiveness of the intervention highlighting an increase of students' attitudes towards science and of career decision-making self-efficacy and a reduction of career decision-making difficulties.

### Limitations

The main limitation is the characteristics of the sample which is not representative of the Italian school reality. This could effect the generalizability of the results.

### Research/Practical Implications

The results could have been strengthened by using a sample more widely representative of the Italian situation. The results of this work allowed to monitor the effectiveness of a teaching method based on Inquiry Based Learning aiming to promote facilitation processes of autonomy, self-efficacy and students' agency for realizing a congruent educational-career choice.

### Originality/Value

The results of this work provided a contribution to the enhancement of educational and career choice in science, increasing students' awareness for promotion of talents.

## Understanding personality profiles of skilled trade careers

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### Purpose

The goal of this study is to help career counselors to guide their clients toward satisfying trade careers by exploring how intra-individual patterns of personality traits relate to interest in a diverse set of skilled careers, including craftwork, agriculture, and police work.

### Design

A large sample of individuals with diverse educational and occupational backgrounds completed several five-factor personality inventories and the Campbell Interest and Skills Survey, an empirically-keyed occupational interest measure based on responses from highly-satisfied employees holding different jobs. Data were analyzed using a configural technique to identify the intra-individual pattern of traits that is maximally-related to different occupational interest domains.

### Results

Results show that interests in different sets of skilled occupations are predicted by distinct patterns of personality traits. For example, interest in mechanical occupations, but not other trades, was marked by low intra-individual levels of agreeableness. Across all occupations, individuals' patterns of traits, not their absolute level of any one trait drove the relationship.



### Limitations

The present study examined 8 broad domains and 16 specific occupations. Future research should extend these findings to other blue-collar occupations.

### Implications

Using the results of this study, career counselors could improve the career satisfaction of their clients by examining the shapes of their personality profiles when considering toward which specific occupations to guide them, rather than considering only their standing on individual traits.

### Originality

This is the first study to examine the intra-individual relationship between personality traits and blue-collar career interests. Results have the potential to substantially improve career counseling.

### **How to make reflective learning effective: The significance of contextualization for reflective learning from formal training**

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### Purpose

Reflection on one's own work practice has been identified as one of the central mechanisms of learning from experience (Boud & Walker, 1990). However, we still do not know much about what exactly makes reflection efficient for learning. This study aimed at examining the impact of contextualization of reflection for learning.

### Design/Methodology

The role of contextualization was tested in an experimental study (N = 30). Learners taking part in an emergency training were given in-

structions for written reflection after the training session. The experimental group (n = 15) was asked to reflect on specific challenges they encountered during the simulation, i.e. their reflection was context-bound to their very personal experience. The control group (n = 15) was asked to reflect on antecedents for good teamwork. All students were instructed to generate as much lessons learned as possible.

### Results

Both conditions evaluated their reflection session as helpful. Students whose reflection was context-bound generated significantly more lessons learned than the control group. The experimental group re-evaluated their performance more critically after reflection.

### Limitations

Further analysis of the written reflection will be necessary to shed light on individual differences within the experimental group.

### Research/Practical Implications

We conclude that reflection should be highly context-bound to be effective for learning. Based on the results, we will give recommendations on how to design training experiences that foster participants' reflective learning.

### Originality/Value

Our study highlights the significance of contextualization of reflection for learning from formal training. It should be of particular interest to those interested in enhancing training effectiveness by reflective learning.

### **Commitment and Creativity**

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### Purpose

Our main objective is to provide a more comprehensive picture of how commitment to multiple inter-organizational entities affects employees to engage in creative behaviour.

**Design/Methodology**

Survey data are collected from 302 participants in collaborative innovation projects which received funding from the UK government. The survey includes self-reports on affective, normative and continuance commitment to the project, the organization, the profession, the client, the supervisor, the career and the job. Creativity is measured by incremental and radical types of creative behaviour related to the four phases of the creative process.

**Results**

Results indicate a complex pattern of effects of commitment to multiple foci on the creative behaviour of employees in inter-organization projects. This indicates the influence and involvement of multiple parties in the creative process, in specific affective commitment to the profession.

**Limitations**

Limitations of the paper are the heterogeneity of the innovation projects and the large number of lead project managers in the sample. Commitment to the supervisor has been related to creativity in previous studies, unfortunately, the current study was unable to provide a coherent picture on the effect of commitment to the supervisor on creativity.

**Research/Practical Implications**

Understanding of the relation between commitment and creativity provides a basis of the management of employee commitments, and, thereby managing employees' creative behaviour.

**Originality /Value**

The value of the paper lies in insight into the effect of commitment on creative behaviour, a matter neglected by previous research.

## **Human Resource Management and affective commitment in Dutch hospitals: a multilevel analysis**

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**Purpose**

The aim of this study was to theorize and empirically test a multilevel model of the relationship between HRM and employee affective commitment to different foci including the organization, the occupation, and the ward. Moreover, we identified alternative mechanisms through which different bundles of HRM practices (i.e. strategic signaling HR practices and benevolence practices) may affect the three commitment types.

**Design/Methodology**

Data were collected using an employee survey (2068 respondents from 168 wards) in four Dutch hospitals.

**Results**

The results showed that both the strategic signaling and benevolence bundles were positively related to the three types of commitment. However, the strongest relationships were found for ward commitment. Finally, strategic climate only mediated the relationship between the strategic signaling bundle and affective ward commitment.

**Limitations**

All data stem from the same source, and might therefore be subject to common method bias.

**Research/Practical Implications**

The key implication of the study is that employee commitment can be enhanced through different pathways linked to different sets of HR practices. One pathway is focused on creating a supportive work environment, the other is directly linked to the strategic goals of the organization.

### Originality/Value

This paper contributes to existing studies in a number of ways. First, it explicitly distinguishes different pathways through which HR practices can affect different foci of commitment. Second, it explicitly links these alternative pathways and theoretical explanations to different sets or bundles of HR practices.

### Linking learning goal orientation to employee creative performance - the role of proactivity

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### Purpose

This paper aims to unravel one of the underlying mechanisms that explain how individual differences in learning goal orientation impact employee creativity. Specifically, we test an integrative framework of how three types of proactive behaviours mediate the relationship between learning goal orientation and creative performance of employees.

### Design/Methodology

Our study is based on dyadic data (N = 378) from a sample of managers, their supervisors and their peers, in a range of industries including service and manufacturing industries.

### Results

The results indicate that proactive strategic behavior and proactive person-environment fit behavior mediate the relationship between learning goal orientation and supervisor ratings of employee creativity, and that proactive work behavior and proactive person-environment fit behavior mediate the relationship between learning goal orientation and peer ratings of employee creativity.

### Limitations

The cross-sectional character of the study elicits caution in interpreting causal findings.

### Research/Practical Implications

Prior studies have shown that employee creativity is a function of personal dispositions. We add to this by considering deliberate actions that employees may undertake to manage their creative performance. The outcomes of our study lead to guidelines for HR practices.

### Originality/Value

Whereas prior studies mainly focused on the direct, bivariate effect of learning goal orientation on creativity, our study examines the underlying mechanisms that explain how learning goal orientation impacts creativity.

### Proactive personality congruence between leader and follower and employee creativity

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### Purpose

This paper aims at gaining in depth insight into the congruence effect of leader and follower proactive personality on leader-membership exchange (LMX) quality, which in turns influences employee creativity. Employee creativity is being perceived as a process, not as an outcome. More specifically this research aims at uncovering the underlying mechanisms in idea selection as a phase in the creativity process.

### Design/Methodology

A study is conducted, encompassing surveys and interviews with leaders and followers in a range of industries including consultancy service industries within a SME context. For the purpose of data analysis cross-level polynomial regressions are used.

### Results

This research proposes that the LMX quality acts as a mediator between leader-follower congruence in proactive personality and employee creativity. Furthermore, the relationship between the leader-member reported LMX quality has stronger ties to employee creativity than follower-reported LMX.

### Limitations

Data are collected from leaders and employees working in a European SME context which may limit the generalizability of the results.

### Research/Practical Implications

Small to midsized enterprises benefit from the insights in the congruence effect of proactive personality between leader and follower on employee creativity. This could lead to more efficient idea selection, which is being perceived as pivotal for SME innovation.

### Originality/Value

The value of this paper entails gaining insight into the congruence between employees' and leaders' proactive personality in predicting employee creativity. Hereby this research focuses on uncovering the underlying mechanisms in idea selection as a phase in the creativity process. Furthermore, follower- and leader-related LMX are being compared.

## **The role of supervisor support for innovation, pro-activity and work engagement as well as willingness for training and development**

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### Purpose

This study investigates the contribution of supervisor support for innovation and individual antecedents of creativity. Specifically, we test a model on how proactivity mediates the relationships between supervisor support with

innovation, work engagement and willingness for training and development.

### Design/Methodology

The model is tested with a sample of about 900 employees from Dutch primary schools. The questionnaire included questions concerning perception of the supervisor's support for innovation, work engagement and the employees proactive behaviour and willingness for training and development.

### Results

The findings show that support of the supervisor for innovation is associated with more work engagement and willingness for training and development. This relation is moderated by proactivity.

### Limitations

The cross-sectional character of the study limits the interpretation of causality.

### Research/Practical Implications

The study confirms that support of the supervisor for innovation in organizations is important for the degree of work engagement and the willingness for training and development. Especially not so proactive employees seem to benefit of the support of their supervisors for innovations.

### Originality/Value

The study is one of the first exploring the influence of proactivity on the relation between supervisor's support for innovation and work engagement and willingness for training and development. It thereby analyses relevant dispositional as well as organizational factors for HRM and its desired outcomes.

## **Unpacking the relationship between workforce-age and creativity: the influence of work-related factors**

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#### Purpose

The aim of this study is to find moderating factors, which reduce the loss of creativity if one gets older (Frosch, 2011; Binnewies, 2008). Work-related factors as autonomy, supervisory support, learning possibilities and personal characteristics (e.g. gender) were examined as potential moderators.

#### Design / Methodology

Questionnaires were completed by 749 individuals aged from 19 to 64 years old. 88% had a bachelor degree or higher. All individuals work in a high-tech environment. Creativity was measured with an open question using a subjective expert rating and a scale used by Diliello and Houghton (Diliello and Houghton, 2008).

#### Results

The findings showed that work-related factors as autonomy, supervisory support, learning possibilities minimize the loss of practiced creativity across the lifespan. In this relationship chronological age has found to be a relevant factor for female, but not for male workers. The proposed model explained 46% of the variation found in practiced creativity.

#### Limitations

It remains to be reviewed how the results compare to lower educated workers or workers in other companies.

#### Research / Practical implications

This research generated a set of recommendations for the company to minimize the loss of employee creativity across the lifespan.

#### Originality / Value

No study before has focused on this combination of work-related factors to counter the loss of practiced creativity across the lifespan.

### **How to become an effective speaker? A comparison of error management training and behavior modeling training**

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#### Purpose

Error management training (EMT) has been proven to be highly effective concerning the acquisition of software skills, whereas behavior modeling training (BMT) is very effective concerning the acquisition of social skills. However, in the field of social skills, no comparison between EMT and BMT has been done yet. Building on social learning theory (Bandura, 1986) and action theory (Frese & Zapf, 1994), we hypothesize that both training types can be successfully applied to the acquisition of communication skills with EMT resulting in better adaptive transfer.

#### Design/Methodology

A laboratory experiment with a 2 (training type: EMT vs. BMT) x 2 (video feedback: yes vs. no) between-subjects design (N = 55 university students) was conducted. During the course of the training, subjects had to deliver three speeches which were all video-recorded and later independently scored by two raters.

#### Results

A RM-ANOVA confirmed the effectiveness of both training types. An ANCOVA revealed that contrary to our expectations, subjects in the BMT condition outperformed those in the EMT condition. The best adaptive transfer was achieved by subjects in the BMT condition who were shown their own video during the training.

#### Limitations

The results are limited by the small number of participants. It remains to be tested to what extent our results generalize to other social skills.

**Research/Practical Implications**

The results imply that concerning communication skills, a training approach based on BMT combined with video feedback is most effective.

**Originality/Value**

To our knowledge, the study is one of the first to compare EMT and BMT in the field of social skills.

**Personality – A success factor in career-coaching?**

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**Purpose**

The personalities of the coach as well as the client are often discussed as an important success factor in coaching literature (Greif, 2008; Schreyögg, 2003). This study examines its influence on clients' outcome evaluation, which includes both operationalized and non-operationalized coaching goals. The data used for this research derives from career-coach training for students based on the training concept for career-coaching by Braumandl and Dirscherl (2005).

**Design/Methodology**

In the context of career-coach training, 116 students conducted their first coaching with an unfamiliar client. The latter were mostly students as well. The personality data was acquired by use of the „Business-focused Inventory of Personality (BIP)“ (Hossiep & Paschen, 2008). Factor analysis revealed four factors for coach and client personality, respectively. The „Check-the-Coach“ questionnaire (Bachmann, Jansen & Mäthner, 2004) was used to evaluate the clients' assessment of coaching outcome including goal achievement, emotional stabilization as well as the

effect on resource activation, behavioral optimization and reflection.

**Results**

Regression analyses showed no significant influence of coach or client personality on outcome evaluation.

**Limitations**

There was no control group available and due to the student sample, generalization of the results to career-coaching in general is arguable.

**Research/Practical Implications**

The results imply, that neither coach nor client personality influences coaching outcome. Regardless of their personalities, the student coaches were able to work successful and the student clients could benefit from the coaching.

**Originality/Value**

This research is one of only a few quantitative studies in the field of coaching with a unique sample size.

**Do simulation-based trainings also work in the field? A comparison of simulation-based trainings and conventional online trainings to improve employees' social skills**

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**Purpose**

Although the practical effectiveness of simulation-based trainings to improve social skills has already been meta-analytically proven, hardly any studies have been conducted using employee samples. We assumed that simulation-based trainings will enhance employees' social skills as well as employees' self-efficacy to apply their social skills.



### Design/Methodology

In a field experiment, 34 service technicians of a large IT-company were randomly assigned to two different training methods: an online simulation-based training and a conventional online training. We measured participants' self-efficacy and social-skills before the training and after 6 weeks of training. As objective measures for social skills we used Situational Judgement Tests with predefined response categories and Situational Judgement Tests with an open response format.

### Results

Repeated measurement ANOVA partly supported our hypotheses: The simulation based training indeed improved the IT-service technicians' social skills ( $\eta^2=.58$ ) measured by the Situational Judgement Tests with open response categories. In contrast to our hypothesis, the conventional training led to a higher self-efficacy in using social skills ( $\eta^2=.09$ ).

### Limitations

It remains to be tested how much our results can be generalized to other professions and whether the effect remains stable after training.

### Research/Practical Implications

These results imply that simulation based trainings seem to be able to enhance employees' social skills and that they are more effective than conventional online trainings.

### Originality/Value

To our knowledge, this is the first study that examines the effects of simulation-based social skills training using a field experimental design in an employee sample.

### **Web-training within three MBA courses: a case study on the virtual asynchronous classroom**

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### Purpose

The aim of this study is to investigate the conditions that determine an effective use of the virtual asynchronous classroom (VAC) in training activities within three MBA courses (N=89) managed through a blended mode "in presence" and "online".

### Design/Methodology

The research was conducted by collecting data about the quantitative and qualitative participation of each student to E-tivities proposed by MBA's teachers in the three VACs, and comparing them both with the personal characteristics of students, and with statements gathered by 89 follow-up interviews with students.

### Results

The study has emphasized how VAC effectiveness must not be taken for granted. Personal characteristics like qualification, age, and level of IT literacy affect participation to the VAC. Other aspects that influence the VAC effectiveness are related to the teacher style: in particular, the kind of E-tivities offered in the VAC, the message writing techniques and the exchange of in-depth and prompt feedback.

### Limitations

Participation to the VAC was required from MBA's direction, but it has not actually been considered for the final evaluation. Furthermore, the quantity and quality of participation observed in each VAC cannot be compared to a standard level.

### Research/Practical Implications

Results can be used for designing E-tivities able to improve the quantity and quality of participation of students to the VAC.

### Originality/Value

The diffusion of Master courses that adopt online or blended methods is very high in Italy, but there's a lack of follow-up researches

that could allow to evaluate their effectiveness and get directions for a better design.

### **Can you learn politics? Political skill development of works councillors**

*Katharina Sarah Oerder (Univ. Bonn, DE) [koerder@uni-bonn.de](mailto:koerder@uni-bonn.de), Gerhard Blickle (Univ. Bonn, DE), James Summers (Iowa State Univ., US)*

#### **Purpose**

The current study seeks to investigate situational predictors of development in political skill within organizations.

#### **Design/Methodology**

150 works councillors took part in the two-wave study. Hierarchical position and time-involvement in works councils were used to predict the amount of change in political skill. Hierarchical multiple regression analyses were conducted to analyze the effects.

#### **Results**

The correlation between political skill at wave 1 and wave 2 was  $r = .57$  ( $p < .01$ ). Hierarchical regression analyses showed a positive effect on change in the relative position in the political skill variables by hierarchical position and formal time involvement ( $.18 \leq \beta \leq .25$ ,  $p < .05$ ) explaining  $3\% \leq \Delta R^2 \leq 5\%$  of incremental variance.

#### **Limitations**

Only two instead of three waves of measurement.

#### **Research/Practical Implications**

Findings show that job demands can change a job incumbent's social skills over time and make her or him more capable of doing well in his job. Thus, it is not always necessary to have available relevant social skills for a new job as these social skills also can develop within the context of the new job.

#### **Originality/Value**

Political skill was improved by hierarchical position and time-involvement in a predictive study over two years with works councillors.

### **Who is most motivated to participate in training?**

*Dorota Godlewska-Werner (Univ. of Gdansk, PL) [wnsdgw@ug.edu.pl](mailto:wnsdgw@ug.edu.pl)*

#### **Purpose**

The aim of this study is to define the relationship between the motivation to participate in trainings and personality traits.

#### **Design/Methodology**

The study is longitudinal. Cattell's Personality Questionnaires and two surveys (at the beginning and at the end of trainings) were used. Participants of soft skills and hard skills trainings took part in the study.

#### **Results**

Statistical analysis indicates the relationship between some personality traits and expectation of trainings. For example there is a correlation between emotional stability and participating in training because of expectation that it will increase skills. Dominance correlates with expectation that trainings will enrich personality. Dutiful employees will take part in trainings because of the opportunity to contact others. Extroversion negatively correlates with taking part in training because of being directed by managers. Personality also has an influence on effects of trainings and satisfaction with learning.

#### **Research/Practical Implications**

The study is a suggestion how to motivate employees to participate in training depending on personality traits. It answers what is the most important reason for participating in training for employees who differ in terms of personality.

#### Originality/Value

Originality of the study is the fact that it is longitudinal and that relationships between personality traits, expectations, attitude towards trainings and effects are presented.

#### **Acceptance of people with disabilities at work: A literature review and first results on the validation of a newly developed questionnaire**

*Katharina Vornholt (Maastricht Univ.)  
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Uitdewilligen (Maastricht Univ.), Frans J.N. Nijhuis  
(Maastricht Univ.)*

#### Purpose

A lack of social acceptance is often the reason why employees with disabilities fail to stay in regular organizations for sustained periods. The study presents a coherent review of the extant literature on factors affecting the acceptance of people with disabilities in regular employment. Based on those findings a questionnaire was developed to assess the acceptance of employees with disabilities within a group of colleagues.

#### Design/Methodology

We conducted a search of the recent literature on the acceptance of people with disabilities at work. In total 40 articles were selected and analyzed. Based on the results a questionnaire on acceptance of employees with disabilities was developed.

#### Results

Results will be presented on the antecedents and consequences of acceptance.

#### Limitations

The observational and cross-sectional nature of studies on acceptance of employees with disabilities precludes us from drawing causal conclusions and investigating the development of acceptance over time.

#### Research/Practical Implications

This study is a first step towards the development of a robust measure of acceptance and the identification of factors contributing to acceptance of employees with disabilities.

#### Originality/Value

The literature review revealed that the concept acceptance respective people with disabilities at work has never been clearly defined and methodically investigated. We contribute to the literature in three important ways: (1) by developing a definition of acceptance based on classical attitude literature, (2) by creating a literature based framework of antecedents and consequence of acceptance, and (3) by developing and validating an instrument to assess the acceptance of people with disabilities at work.

#### **An inclusive work redesign: Experiences with the method 'Inclusive Redesign of Work Processes'**

*Gemma M.C. van Ruitenbeek (Maastricht Univ.)  
[gemma.vanruitenbeek@maastrichtuniversity.nl](mailto:gemma.vanruitenbeek@maastrichtuniversity.nl)*

#### Purpose

On one hand, economic and technological developments have resulted in a growing group of people not able to participate in the regular labor market without support. On the other hand, demographic developments cause difficulties for companies in filling in vacancies. One solution to this problem is to reorganize and distribute work structures differently in order to create functions that can be executed by people with disabilities. The first practical experiences with an alternative approach to work redesign, the method 'Inclusive Redesign of Work Processes', will be presented.

#### Design/Methodology

Fifty different positions were created for the target group in a regular health care organization based on this method. A qualitative eval-

uation approach was used to assess the practical applicability of the work redesign method.

#### Results

The results suggest that the method is practically applicable for the creation of sustainable employment, and that the integration of people from the target group is economically and socially advantageous.

#### Limitations

The findings are based on a single study in one organization.

#### Research/Practical Implications

The method can be applied in a variety of companies to enable the integration of people with disabilities into the work force. However, it is a complex and labor-intensive method that requires expertise in the execution of the analysis and the assessment of the target group.

#### Originality/Value

This is the first research project that focuses on work design solutions to facilitate the development of an inclusive organization.

# 7. Leadership and management

## Symposia

### New Perspectives on Influence Processes in Organizations: Integrating Leadership and Followership

Chairs: *Susanne Braun* (Ludwig-Maximilians-Univ. München) [sbraun@psy.lmu.de](mailto:sbraun@psy.lmu.de), *Marion Schmidt-Huber* (Ludwig-Maximilians-Univ. München) [Marion.Schmidt-Huber@psy.lmu.de](mailto:Marion.Schmidt-Huber@psy.lmu.de)

#### State of the Art

Over the last decades, research and practice in organizations predominantly focused on influence through leadership, which has been shown to affect multiple organizational outcomes (Hiller, DeChurch, Murase, & Doty, 2011). Yet, organizational scholars call for a broadened perspective, which explicitly integrates leadership and followership research in organizational contexts (DeRue & Ashford, 2010).

#### New Perspectives/Contributions

This symposium responds to the stipulated shift in perspective with four presentations, which provide innovative theoretical and empirical insights. First, Schmidt-Huber et al. present empirical evidence suggesting that leaders' prototype theories predict ethical leadership, while anti prototype theories predict authoritarian leadership. Second, Kerschreiter et al. empirically demonstrate how followers' trust in leaders moderates the relations of authentic leadership with citizenship performance and job satisfaction. Third, Weisweiler et al. present results from multi-level analyses: followers' as well as leaders' attachment anxiety were identified as positive

predictors of followers' continuance and normative organizational commitment. Fourth, Schyns and Thomas introduce results from qualitative analyses, which integrate Romance of Leadership (i.e., over-attributions of responsibility for organizational performance to leaders) with hiring and firing practices in professional English football.

#### Research/Practical Implications

This symposium provides innovative theoretical views and empirical corroboration in response to calls for more integrative perspectives on leadership and followership. Based on a diverse set of contributions, we aim at inspiring future research and practice in organization to explicitly take into account the interdependence of the two perspectives.

### ***Presentations of the Symposium***

#### **Ethical, authoritarian and laissez-faire leadership: Do implicit followership theories matter?**

*Marion Schmidt-Huber* (Ludwig-Maximilians-Univ. München) [Marion.Schmidt-Huber@psy.lmu.de](mailto:Marion.Schmidt-Huber@psy.lmu.de), *Franziska Lamprecht* (Ludwig-Maximilians-Univ. München), *Dieter Frey* (Ludwig-Maximilians-Univ. München)

#### Purpose

Leaders may shape the pattern of interaction between leader and follower based on the use of implicit followership theories (Sy, 2010). As a relevant question for leadership research and development, this study analyzes if leaders with positive assumptions about followers behave differently than leaders with negative assumptions (McGregor, 1986). We hypothesized that leaders with positive followership theories show more effective and less destructive behaviors than leaders indicating more negative assumptions about their followers.

### Design/Methodology

To test our hypothesis we measured the impact of physicians' (N = 90) implicit followership theories (Sy, 2010) about nurses on different styles of leader behavior. The paper-pencil survey contained measures of ethical leadership (Brown et al., 2005), authoritarian leadership (Flood et al, 2000) and laissez-faire leadership (Bass & Avolio, 1995).

### Results

Regression analyses showed moderate relationships between physician's positive assumptions (prototype theories) and the use of ethical leadership behavior, as well as between negative assumptions (antiprototype theories) and authoritarian leadership behaviors. No significant correlations between implicit followership theories and laissez-faire leadership occurred.

### Limitations

It remains to be tested if the results can be replicated in a longitudinal research design to clarify the causality of the effects.

### Research/Practical Implications

Our results indicate that implicit followership theories may influence leader-follower-interaction. Therefore the concept should be considered in the development of leaders.

### Originality/Value

Due to the use of different concepts of leader behaviors (effective, destructive and laissez faire) this study provides insights into the assumed relationship between implicit followership theories and leader behaviors.

## **Interactive effects of authentic leadership and follower trust in leadership on citizenship performance and job satisfaction**

Rudolf Kerschreiter (Freie Univ. Berlin) [Rudolf.Kerschreiter@fu-berlin.de](mailto:Rudolf.Kerschreiter@fu-berlin.de), Jennifer Weihs (Kienbaum Management Consultants), Dieter Frey (Ludwig-Maximilians-Univ. München)

### Purpose

The present study builds on recent theory and empirical research emphasizing the important role of trust in leadership as an explanatory mechanism in leader-follower relationships. We predicted that for employees with high trust in leadership effects of authentic leadership will be especially pronounced with regard to relational criteria (e.g. citizenship performance) while for employees with low trust in leadership effects of authentic leadership will be especially pronounced with regard to personal criteria (e.g. job satisfaction).

### Design/Methodology

These hypotheses were tested using data collected from 188 employees from different organizations in Germany. Participants rated authentic leadership, trust in leadership, two facets of citizenship performance (helping and persistence), and job satisfaction.

### Results

Results confirmed the predicted interaction effects of trust in leadership and authentic leadership with regard to helping, persistence, and job satisfaction.

### Limitations

Although single source biases can not account for the three interaction effects we found, future research needs to substantiate our results by using independent measurements of relevant leader and follower evaluations and by applying a longitudinal research design.

### Research/Practical Implications

Our results suggest that leaders need to take into account the status quo of follower trust in leadership to more precisely understand the effects of authentic leader behaviors on followers.

### Originality/Value

Current research treats trust in leadership mostly as a mediator linking authentic (and



other) leadership behavior and outcomes. To our knowledge, the present study is the first attempt to more closely understand the moderating role of trust in the relationship between authentic leadership and outcomes.

### **Leader and follower attachment orientations as predictors of followers' organizational commitment: Initial evidence from multilevel analyses**

*Silke Weisweiler (Ludwig-Maximilians-Univ. München) [weisweiler@psy.lmu.de](mailto:weisweiler@psy.lmu.de), Susanne Braun (Ludwig-Maximilians-Univ. München), Cristina Oarga (Univ. zu Köln), Dieter Frey (Ludwig-Maximilians-Univ. München)*

#### **Purpose**

Initial theoretical and empirical consideration has underlined the importance of adult attachment orientation for leader-follower relations (Davidovitz, et al., 2007; Popper & Amit, 2009). Yet, it remains unclear (a) to what extent leader and follower attachment orientations predict followers' commitment to an organization, and (b) how these attachment orientations relate to other established predictors of organizational commitment. We therefore hypothesized upon the differential relations between leader and follower attachment styles, follower work motivation, LMX and three forms of organizational commitment.

#### **Design/Methodology**

The relations were tested in a field study based on a preliminary sample of 93 employees and 21 supervisors. We conducted multilevel analysis with HLM.

#### **Results**

Leaders' and followers' attachment anxiety related positively to continuance and normative organizational commitment, but not to affective organizational commitment. Follower work motivation related positively to affective and normative organizational commitment,

but not to continuance commitment. Leaders' and followers' attachment avoidance did not show significant relations to the outcome variables.

#### **Limitations**

These initial results require further testing based on additional data from leaders and followers.

#### **Research/Practical Implications**

Our findings suggest that while attachment anxiety may foster continuance and normative commitment, affective commitment may require work motivation and LMX. The findings hold important implications for fostering organizational commitment as well as for theory and research on leader-follower relations at multiple levels.

#### **Originality/Value**

To our best knowledge, this is the first empirical attempt to test the differential relations of leader and follower attachment styles with follower work motivation, LMX and three forms of organizational commitment.

### **Romance of leadership in the context of football – A thematic analysis of the English football magazine “Four-Four-Two”**

*Birgit Schyns (Durham Univ.) [birgit.schyns@durham.ac.uk](mailto:birgit.schyns@durham.ac.uk), Christopher J. Thomas (Durham Univ.)*

Romance of Leadership (RoL; Meindl et al., 1985) describes the tendency to over-attribute responsibility for organisational performance to leaders. Considering the hiring and firing practices by many football clubs, the phenomenon is highly relevant in this context. While manager tenure has decreased from 3.12 years in 92/93 to 1.47 years in 08/09 (Bridgewater, 2010), research in economics suggests that longer tenures are advantageous (Hughes et al., 2010). We examined who shows RoL and in which way.

**Design/Methodology**

We analysed 48 issues of a popular English football magazine with respect to quotes about managers.

**Results**

The first theme that emerged refers to “the output of romance of leadership”. The second theme, “construction of the implicit leader image”, provides clarifying insights into the nuances of how RoL is constructed. While idea of manager-environment mutuality was present in each stakeholder group, the manager was still romanticised. Players and managers tended to refer to the skills, traits, and knowledge of the manager instead of any omnipotent ability.

**Limitations**

The analysis only comprises one football magazine and needs to be expanded by further sources such as national newspapers.

**Research/Practical Implications**

Knowledge about who holds romantic views of football managers and how these are constructed can help clubs overcome RoL and take more economically sensible decisions when it comes to manager change.

**Originality/Value**

To our knowledge, this is the first study investigating different stakeholders' conceptualisation of Romance of Leadership. The results can be useful for further studies aimed at more rational decisions when replacing managers.

## **Leadership with an Ethical Orientation: Empirical Evidence and Avenues for Future Research**

*Chairs: Armin Pircher Verdorfer (TUM School of Management, TU München) [armin.pircher-verdorfer@tum.de](mailto:armin.pircher-verdorfer@tum.de), Claudia Peus (TUM School of Management, TU München) [claudia.peus@tum.de](mailto:claudia.peus@tum.de)*

**State of the Art**

Leadership with an ethical orientation has gained increasing attention in recent years, leading to the development of several new constructs including authentic, transformational or servant leadership (Cropanzano & Walumbwa, 2011). Due to their novelty empirical investigations on the outcomes of these types of leadership as well as the mechanisms that mediate their impact have been frequently called for.

**New Perspective/Contribution**

This symposium highlights empirical research on the effects of different types of ethically-oriented leadership and proposes avenues for future research in this area.

First, van Dierendonck and de Sousa highlight findings on the impact of shared servant leadership on team performance. Second, Pircher Verdorfer and Peus present a German measure of servant leadership and findings on its impact on followers' personal development. Third, Hoerner et al. provide evidence for the positive relations between authentic leadership and follower well-being. Fourth, Sparr and Peus demonstrate the critical role of ethics-related leadership and fairness in the process of organizational change by investigating these constructs in a merger. Finally, Schilling and Schyns discuss the need to also consider unethical leadership in order to broaden our understanding of leader influence on ethical work practices and employee behaviors.

**Conclusion and Implications for Research/Practice**

This symposium brings together theoretical perspectives and empirical findings from several different leadership approaches, which all share an explicit concern with moral issues. By examining relevant theoretical implications, research methodologies, and controversies we intend to inspire future research and practice in this area.

## ***Presentations of the Symposium***

### **A shared leadership perspective on servant leadership**

*Dirk van Dierendonck (Rotterdam School of Management, Erasmus Univ.) [dvandierendonck@rsm.nl](mailto:dvandierendonck@rsm.nl), Milton Correia de Sousa (Rotterdam School of Management, Erasmus Univ.)*

#### **Purpose**

Servant leadership theory is a relatively new concept in academic leadership research, with the first empirical evidence only now starting to become available. Servant-leaders focus on others first, emphasizing empowerment, an attitude characterized by humility and focusing on building strong and lasting relationships. This presentation shows how a shared servant leadership perspective can provide a better understanding of the mechanisms responsible for a work climate that enables performance in organizations and teams. Shared leadership changes the focus from a vertical leadership approach where one leader influences several followers to a horizontal approach where leadership becomes a joint activity of the team members showing leadership behavior towards each other.

#### **Design/Methodology**

The relevance of this perspective is illustrated with two studies using a social network approach to collect data. Both studies involved students working together in teams (244 persons 61 teams and 288 persons in 72 teams).

#### **Results**

The most important findings were that shared servant leadership was a strong determinant of team behavioral integration, which mediated the influence of shared servant leadership on team performance.

#### **Originality/Value**

The relevance of shared leadership theory for servant leadership is conceptually argued for and empirically shown. A new promising short

four-dimensional measure for shared servant leadership is introduced that allows for a valid and reliable way to collect data from a social network perspective.

### **Investigating the validity of a German-speaking measure of servant leadership**

*Armin Pircher Verdorfer (TUM School of Management, TU München) [armin.pircher-verdorfer@tum.de](mailto:armin.pircher-verdorfer@tum.de), Claudia Peus (TUM School of Management, TU München)*

#### **Purpose**

Empirical research on servant leadership has received increasing attention in recent years. This study investigated the psychometric properties of a German version of the multi-dimensional servant leadership survey (SLS), developed by van Dierendonck and Nuijten (2011). Furthermore, the study aimed to expand current research by examining the impact of servant leadership on followers' personal development.

#### **Design/Methodology**

Five samples were used in the study for a total of 533 participants from various branches of business in Germany. Standardized questionnaires were distributed using a web-based survey program.

#### **Results**

Confirmatory analysis revealed that the adapted instrument had adequate factorial validity. With regard to content validity, servant leadership was related to other relevant leadership measures such as transformational leadership, ethical leadership, and leader-member exchange. Evidence for criterion-related validity is based on findings relating servant leadership to work-related attitudes and behavioral orientations such as job satisfaction, affective commitment, and OCB. Finally, servant leadership was related to followers' occupational self-efficacy and organization-

based self-esteem, both representing indicators of personal development.

#### Limitations

Limitations refer to the cross-sectional design and the predominant use of self-report measures.

#### Research/Practical Implications

The adapted instrument represents a valid and reliable measure that can be used in the area of leadership research and development practices with German-speaking samples.

#### Originality/Value

The contribution discusses the first empirical research study investigating the psychometric properties of a German-speaking measure of servant leadership. Furthermore, the interrelation between servant leadership and followers' occupational self-efficacy and organization-based self-esteem represents a unique contribution to empirical servant leadership research.

### **The impact of authentic leadership on follower stress appraisal and coping behaviors: The mediating role of follower psychological capital**

*Katharina Hoerner (Center for Leadership and People Management, LMU München) [Katharina.Hoerner@psy.lmu.de](mailto:Katharina.Hoerner@psy.lmu.de), Silke Weisweiler (Center for Leadership and People Management, LMU München), Lisa Rexroth (Center for Leadership and People Management, LMU München), Dieter Frey (Center for Leadership and People Management, LMU München)*

#### Purpose

The concept of authentic leadership has emerged as an extremely popular topic in leadership research over the last decade (Avolio et al., 2004). Another related research approach focuses on the impact of leadership behaviors on employee health and well-being outcomes, as healthy employees are high achievers and more satisfied. We argue that

the influence of authentic leadership behaviors on follower well-being is explained by emotional contagion where positive emotions elicited by the leader are transferred to other employees within the same team (Macik-Frey et al., 2009).

#### Design/Methodology

To test these assumptions, we collected data from employees ( $N = 180$ ) at a large international company located in a major city in Germany. Data were collected via online questionnaire and at two points of measurement separated by approximately three weeks.

#### Results

Initial results from regression and mediation analyses supported all hypotheses. It was found that authentic leadership was positively related to challenge appraisal, positive coping styles and job satisfaction and that this relationship was mediated by follower psychological capital.

#### Limitations

As the current study relies on self-report data of stress and coping solely, it remains to be tested how authentic leadership influences more objective measures of stress and coping.

#### Research/Practical Implications

The current study provides initial evidence for the beneficial consequences of authentic leadership in terms of follower stress and well-being. Thus, promoting authentic leadership in organizations may help to strengthen employees' confidence to overcome stressful situations at work.

#### Originality/Value

To our knowledge, the study is the first to empirically analyze the impact of authentic leadership on follower stress appraisal and coping behaviors.

### **Readiness to proactively support change in a merger: A model of antecedent ethical conduct**

Jennifer Sparr (TUM School of Management, TU München) [jennifer.sparr@tum.de](mailto:jennifer.sparr@tum.de), Claudia Peus (TUM School of Management, TU München)

#### **Purpose**

This study focuses on ethical conduct within the organization as antecedent of employees' readiness to proactively support change in a pre-merger setting. Transformational leadership (TFL) and fairness of the organizations' communication processes are hypothesized to predict trust in the company which in turn is expected to positively predict commitment to change and, finally, readiness to proactively support the change.

#### **Design/Methodology**

Data were collected in two public service companies, shortly after their merger was announced but several months before the actual merger took place and first changes were implemented. All employees from both companies were invited to take part in a paper and pencil survey, which was applied in a classroom setting. Thus, data were collected from 216 participants, reflecting an overall response rate of 74,7 %.

#### **Results**

Results from structural equation modeling conducted with AMOS support our hypotheses.

#### **Limitations**

Although our theory and model include causal assumptions, we cannot draw causal conclusions from our data, as they are cross-sectional. Moreover, our study is prone to typical common source – common method biases.

#### **Research/Practical Implications**

The importance of ethical orientation in leadership and communication needs to be emphasized in early stages of change in order to

gain employees trust and willingness to support the change. Longitudinal studies are required to shed light on the relative importance of leadership and fairness over time in the change process.

#### **Originality/Value**

This study adds to the literature in shedding more light on the role of ethical conduct and its impact on employees' pre-change behavioral intentions.

### **Destructive leadership, its consequences and possible moderators: Outlining a theoretical model**

Jan Schilling (Kommunale Hochschule für Verwaltung in Niedersachsen) [Jan.Schilling@nds-sti.de](mailto:Jan.Schilling@nds-sti.de), Birgit Schyns (Durham Univ.)

#### **State of the Art**

The last decade has seen an increasing interest not only in ethical but also unethical (i.e. destructive) leadership (e.g. abusive supervision). A recent meta-analysis showed that, contrary to expectations, the effects of destructive leadership are not stronger than those of constructive leadership. This raises the question of possible moderators influencing the impact of destructive leadership. One issue is the attribution of intent regarding the behaviour shown. Another issue is whether the behaviour is part of the organizational culture or shown by only one leader.

#### **New Perspectives/Contributions**

The purpose of our paper is to present a theoretical model which elucidates the importance of attributed intent and context with regard to the perception and consequences of destructive leadership.

The model of destructive leadership hypothesizes that followers who perceive the destructive behaviour of their leader as being intentional (attribution of control) will show different emotional reactions than followers who perceive it as unintentional as well as when

behaviour is part of a culture or idiosyncratic. Possible other moderators (e.g. follower affectivity, task interdependence) will also be discussed.

#### Research/Practical Implications

The paper is theoretical in nature but will present testable hypotheses. The theoretical model should be able to stimulate necessary empirical research in the area of destructive and ineffective leadership.

#### Originality/Value

The development of a theoretical model concerning the impact of destructive leadership fills a gap in the leadership literature.

## Perspectives on Leadership I: Effectiveness, Diversity and Wellbeing

Chairs: *Torsten J. Holstad (Univ. of Leipzig)* [torsten.holstad@uni-leipzig.de](mailto:torsten.holstad@uni-leipzig.de), *Lioba Werth (Technical Univ. Chemnitz)* [lioba.werth@psychologie.tu-chemnitz.de](mailto:lioba.werth@psychologie.tu-chemnitz.de), *Jürgen Wegge (Technical Univ. Dresden)* [wegge@psychologie.tu-dresden.de](mailto:wegge@psychologie.tu-dresden.de)

Facilitator: *Christine Gockel (Univ. de Fribourg, CH)* [christine.gockel@unifr.ch](mailto:christine.gockel@unifr.ch)

#### State of the Art

Perspectives on leadership I and II present empirical studies applying different methods, an experimental study and a metaanalysis from the area of leadership research. Both symposia include international contributions and an intervention study providing interesting implications for practitioners. Perspectives on leadership I focuses on the relationship between leadership and different outcomes like effectiveness and wellbeing. Diversity is addressed as an important challenge in the light of demographic change.

#### New Perspective/Contribution

The first study by Knoll et al. focuses on the positive effect of shared leadership on team effectiveness and investigates whether this

effect depends on follower silence. Jungbauer et al. present an experimental study assessing visionary leadership as a buffer against negative effects of team crises on team performance. The third study by Bilinska et al. addresses the consequences of younger leader-older subordinate dyads for the wellbeing of these subordinates. Age-differentiated leadership is presented as a potential remedy against negative effects on elder subordinates' wellbeing. Finally, Rigotti et al. present an evaluation study of a training program on health-promoting leadership including data on both formative and summative evaluation. 11 teams and their leaders took part in this program over a time span of 16 months. Christine Gockel will integrate the different contributions as a discussant.

#### Conclusion and Implications for Research/Practice

The contributions in this symposium extend existing research and point out new directions for leadership research. Practical implications include suggestions how leadership effectiveness and wellbeing in organizations can be enhanced. Diversity issues are discussed and an innovative training program is presented.

## ***Presentations of the Symposium***

### **How shared leadership influences employee silence and team effectiveness – A multilevel approach**

*Michael Knoll (Durham Univ. Business School)* [michael.knoll@durham.ac.uk](mailto:michael.knoll@durham.ac.uk), *Christine Gockel (Univ. de Fribourg, CH)*, *Lioba Werth (Technical Univ. Chemnitz, DE)*

#### Purpose

Shared leadership (SL) can improve team performance (Carson, Tesluk, & Marrone, 2007). However, the processes responsible for this positive effect are not well understood yet. We examined to what extent four forms of employee silence (i.e., acquiescent, quiescent,



prosocial, and opportunistic silence; Knoll & van Dick, 2012) contribute to this effect.

#### Design/Methodology

Seventy-seven teams (with a total of 443 members) from a large German bank participated in a questionnaire study. For 40 teams, supervisor ratings of team effectiveness were available.

#### Results

Teams were rated to be more effective by supervisors, the more constructive SL occurred. More detailed multilevel analyses showed that team constructive SL was negatively related to employee acquiescent silence and that aversive SL was positively related to acquiescent and quiescent silence. Furthermore, the negative effect of aversive SL on team performance was mediated by acquiescent silence.

#### Limitations

No cause-effect-relationships can be deduced due to the cross-sectional design.

#### Research/Practical Implications

Our research shows that SL can impact individual team member behavior, specifically the tendency to remain silent when confronted with problems at work. Given the difficulties that traditional leaders face when trying to overcome employee silence (Detert & Edmondson, 2011), SL emerges as a promising alternative.

#### Originality/Value

We introduce employee silence as an underlying process responsible for the effect of SL on team effectiveness. In addition, we contribute to the understanding of antecedents of employee silence.

### **Differential effects of team crises triggered by membership change on team performance: The role of visionary leadership**

*Kevin-Lim Jungbauer (Technical Univ. Dresden, DE) [jungbauer@psychologie.tu-dresden.de](mailto:jungbauer@psychologie.tu-dresden.de), Meir Shemla (Technical Univ. Dresden, DE), Jürgen Wegge (Technical Univ. Dresden, DE)*

#### Purpose

The entry and exit of team members can have varied effects on team performance. However, beyond its disruptive potential, rarely have wider implications of membership change for the team experience been considered. This study extends research by examining the association with different types of team crisis. We posit that team members may experience production blocking after member entry and value conflicts after member exit. We argue that visionary leadership is instrumental in overcoming these crises.

#### Design/Methodology

We conducted a laboratory study with a 3 (member entry, member exit, control condition) x 2 (visionary, laissez-faire leadership) experimental design with two confederates enacting the manipulations. The experiment was disguised as an ideas competition where two-person student teams generated ideas for controversial consumer products (N=144).

#### Results

ANCOVA revealed that teams performed worse in the membership change conditions compared to the control condition, whereby evidence was found that visionary leadership buffers negative performance effects.

#### Limitations

As the study is conducted as a laboratory experiment with a student sample, the generalizability of findings is limited.

#### Research/Practical Implications

The findings allow for the development of interventions that promote higher team effectiveness when teams experience difficult times.

### Originality/Value

Of the few studies that examine the dynamic nature of team membership, this study is the first to investigate the relation to team crises and how a leadership intervention can mitigate ensuing performance losses.

### Young leads old: Consequences of age reversed leader-subordinate relationships

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#### Purpose

Due to the aging workforce an increasing number of subordinates report to supervisors much younger than themselves. While these younger leader-older subordinate dyads (YLOS) are of growing importance for HR managers, researchers have paid little attention to the phenomenon of age reversed relationships in the work context. The present study investigates the consequences of YLOS dyads for their relationship quality, wellbeing and work attitudes. Moreover, the moderating aspects of individual attitudes and age differentiated leadership style are investigated in order to detect the conditions under which age reversal between supervisor and subordinate leads to negative or positive outcomes.

#### Design/Methodology

Data was collected via self-report from 350 nurses and 90 team leaders. Participants' self-reports included wellbeing, work ability, turnover intention, and relationship quality ratings (LMX-7). Subordinates rated the degree to which their supervisor showed age differentiated leadership practices (FAF 16) and how much they expected to have problems with a younger supervisor.

#### Results

Overall, YLOS dyads did not differ significantly regarding their LMX or wellbeing ratings com-

pared to dyads with older supervisors. However, when subordinates of younger supervisors held more negative expectations towards younger leaders their LMX, wellbeing and work satisfaction ratings were significantly lower. Supervisors' age differentiated leadership buffered these negative consequences.

#### Research/Practical Implications

The results indicate that subordinates' expectations and beliefs about younger leaders have a great impact on the relationship quality between them and their younger supervisor. Supervisors' age differentiated leadership style can weaken the negative outcomes.

### Training health related leader-follower interaction: Results of formative and summative evaluations

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#### Purpose

There is growing evidence, that leaders play a crucial role for employees' wellbeing. We report about a field study which aimed at furthering health related leadership. The intervention contained diverse modules, including lectures, workshops, and coaching over a time span of 16 months. Our intervention is distinct to other leadership training programs, as all members of the team participated in the process.

#### Design/Methodology

The intervention was carried out with 11 teams (107 employees). A matched sample served as control group for the summative evaluation. Data were collected for formative evaluation by questionnaires filled out by the participants immediately after two workshops. Additionally for each workshop an assistant to the trainer rated a set of contextual variables. Ratings on work stressors, leaders' behavior

(self ratings and ratings by followers) and health of followers were collected prior, and after the intervention. A follow up is planned for January 2013.

#### Results

Results of the formative evaluation show, that most parts of the interventions were conducted as planned. An important indicator for satisfaction with workshops was the presentation of team-specific results from the T1-survey. Furthermore results from summative evaluation will be presented.

#### Limitations

Private business is underrepresented in our sample.

#### Research/Practical Implications

Inclusion of a survey-feedback loop within occupational health interventions seems to be a crucial factor for participants' satisfaction with the programme. Based on our results, we will present evidence based suggestions how programmes to further health related leadership should be designed.

#### Originality/Value

Our quasi-experimental longitudinal design allows for causal interferences.

## Leadership and Motivation

Chairs: Nishat Babu (Aston Univ.)  
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#### State of the Art

There has been a promulgation of theories to explain the commonly assumed motivational effects of leadership (e.g. Bass, 1999). Nevertheless, a dearth persists in the identification of mechanisms and conditions determining leadership's motivational effects (Avolio et al., 2009).

#### New Perspective/Contribution

Organisational identity and the interaction between follower perceptions of collective self-continuity and follower uncertainty, in determining the motivational success of a leader's vision for change, will be explored (Venus *et al*). Self-regulatory focus theory is used to explain how a prevention motivational focus of both the leaders and followers can serve to hinder follower creativity, as mediated by follower creative self-efficacy (Sacramento and Zhou), whilst mediating effects of self-determination between respectful leadership and employee job satisfaction, as moderated by vertical respect for leader, will be scrutinised (Decker *et al*). Furthermore, Lohrey and Guillaume look at the positive impact of transformational and transactional leadership in ensuring positive employee health outcomes through their effect on empowerment; moderated by favourableness of work situation. Finally Winkler *et al* demonstrate the positive effects of transformational leadership on employee proactivity, through its positive effect on employee empowerment and responsibility for change, and team climate of psychological safety respectively. In the subsequent discussion, differences and communalities in the studies' underlying theoretical frameworks will be identified, as well as future research questions and practical implications.

#### Conclusions and Implication for Research/Practice

Efforts have been made to identify the mechanisms and boundary conditions determining the motivational success of leaders in orchestrating change and follower creativity, and enhancing employee job satisfaction, health, and proactivity.

### ***Presentations of the Symposium***

### **What are effective visions of change? Leader assurance of collective continuity and the moderating role of follower uncertainty**

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#### **Purpose**

Despite wide consensus that leader vision is a key vehicle for leaders to motivate followers to support change, it remains far from clear what characterizes an effective vision of change (Yukl, 2010). We build on the social identity approach of organizational change (e.g., van Knippenberg & Hogg, 2003), which asserts that followers resist change because change poses a threat to the organizational identity; an important basis for follower self-definition and uncertainty reduction. Accordingly, we hypothesize that a vision of change which assures that the essence of the organizational identity remains unchanged will mobilize follower support for change, and that this relation is mediated by the interaction between follower perception of collective self-continuity and follower uncertainty.

#### **Design/Methodology**

We conducted two field studies in organizations undergoing change and two laboratory experiments.

#### **Results**

Study 1 provided support for our main hypothesis. Studies 2-4 replicated this finding and found support for our moderated-mediation model.

#### **Limitations**

It remains to be tested whether visions of continuity also result in positive effects in terms of team performance.

#### **Research/Practical Implications**

These results imply that researchers should explore the various rhetorical techniques

leaders use to communicate collective continuity.

#### **Originality/Value**

By showing that leader visions can gain follower support for change by assuring that the key features of the organizational identity will be preserved, the study contributes to the scarce, if not absent, literature on what constitutes effective visions of change.

### **When creative self efficacy does not lead to creativity: The effects of leaders' and followers' prevention focus**

*Claudia Sacramento (Aston Univ.) [c.a.sacramento@aston.ac.uk](mailto:c.a.sacramento@aston.ac.uk), Qin Zhou (Univ. of York)*

#### **Purpose**

Given the current recession climate, company survival has become a major concern for most leaders. Relating to this, with increasing levels of competition and shrinking markets, organizations see in their followers' creativity, a source for organizational survival. However, these same two forces might be paradoxical. Creative self-efficacy is a key predictor of creativity, however we know little about how individuals' creative self-efficacy is affected by concerns regarding organizational survival.

In this study we propose that leaders' motivational regulatory focus towards avoiding losses and seeking security undermines their followers' creative-self efficacy, and the relationship between creative self-efficacy and creativity is also negatively affected by followers' chronic prevention focus.

#### **Design/Methodology**

Our sample included 67 leaders and 134 followers working in the hospitality industry. Creativity was rated by leaders; all other measures were rated by followers.

### Results

As expected, we found a negative relationship between leaders' motivational regulation towards security and losses, and followers' creative self-efficacy. Furthermore, the relationship between creative self-efficacy and creativity was also negative for those followers with a high chronic prevention focus.

### Limitations

The sample size is relatively small and the cross-sectional nature of our design impedes conclusions regarding causality.

### Research/Practical Implications

These results extend theory on creative self-efficacy and provide managers with important information on how they can affect their followers' creativity.

### Originality/Value

By integrating self-efficacy and self-regulation theories, this study extends our understanding of how leader and followers' characteristic interact to affect creativity.

### **Getting respect from a boss you respect: How different types of respect interact to explain subordinates' job satisfaction as mediated by self-determination**

*Catharina Decker (Univ. of Hamburg) [decker@respectresearchgroup.org](mailto:decker@respectresearchgroup.org), Niels van Quaquebeke (Kühne Logistics Univ.), Matthias M. Graf (Univ. of Hamburg)*

### Purpose

Leadership research differentiates between two types of respect: horizontal respect, i.e. treating others with dignity, and vertical respect, i.e. genuinely honouring other's merits. We set out to investigate the impact of these two forms of respect on subordinates' satisfaction with their jobs. Specifically, we hypothesize that the link between horizontally respectful leadership and subordinates' satisfaction at work is stronger when subordinates can also vertically respect the leaders they feel

respected by. Moreover, we seek to explain this relationship via the motivational concept of self-determination as the mediator.

### Design/Methodology

Two survey studies (N=391 and N=518) were conducted to examine the proposed moderated mediation.

### Results

Our moderated mediation analyses show that respectful leadership is positively related to job satisfaction (additionally measured as intention to leave in study 2). This relationship was mediated by subordinates' self-determination. And it was, as predicted, stronger when subordinates respected the leaders they felt respected by.

### Limitations

Although single source and cross-sectional data are less of a problem with moderation hypotheses, we would nevertheless encourage future studies to collect multi source data.

### Research/Practical Implications

Leaders should not only work on their (respectful) leadership style but also on whether they are respected. Both might be related, however.

### Originality/Value

This is the first leadership study to investigate the effect of two forms of respect in interactive concert on subordinates, while at the same time outlining a clear motivational mechanism to explain workplace satisfaction.

### **The effects of transformational and transactional leadership on employee health through empowerment in unfavourable working situations**

*Sven Lohrey (Aston Univ.) [lohreys@aston.ac.uk](mailto:lohreys@aston.ac.uk), Yves Guillaume (Aston Univ.)*

### Purpose

Building on theorizing about empowerment, this study examined how transformational and transactional leadership affect employee health, as reflected in subordinates' rates of presenteeism and sickness absenteeism as well as physical symptoms of ill health in favourable and unfavourable situations at work. It was hypothesised that both leadership styles decrease employees' presenteeism rates, sickness absenteeism rates, and symptoms of ill health by increasing subordinates' psychological empowerment, when they are exposed to unfavourable situations at work, characterised by conflicting demands, poor general health, and limited resource availability.

### Design/Methodology

85 office workers, who were employed by a large German energy provider, filled in two online questionnaires at intervals of four weeks (time 1: independent and mediator variables; time 2: moderator and dependent variables).

### Results

Moderated mediation analyses fully supported our hypotheses; in unfavourable situations transactional and transformational leadership lead to favourable health outcomes, which was accounted for by empowerment.

### Limitations

While common source/method bias is less of a problem when testing for moderation effects, replicating our findings with a truly multiple source/method design would be desirable.

### Research/Practical Implications

Results highlight the important role of leadership and empowerment in facilitating favourable health outcomes in unfavourable situations.

### Originality/Value

The study contributes to the extant literature by providing empirical evidence for the positive effects of leadership on previously neglected health outcomes, testing the mediating effect of empowerment, and exploring potential boundary conditions by including the favourableness of the working situation.

## Multilevel effects of transformational leadership on employee proactivity

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### Purpose

Organizations need proactive employees in order to stay competitive in dynamic and uncertain environments. Transformational leadership theory suggests that through their impact on employee motivation, as well as on team climate, transformational leaders may promote higher levels of employee proactivity. Using a multilevel framework, we investigated the simultaneous effects of individual-level and team-level transformational leadership on employee proactivity.

### Design/Methodology

We collected questionnaire data from 206 employees nested in 34 teams. The team leaders provided ratings of employee proactivity.

### Results

Hierarchical linear modeling resulted in independent positive effects of individual-level and team-level transformational leadership on employee proactivity. More specifically, at the individual level, transformational leadership fosters employee proactivity via its positive effects on perceived psychological empowerment and responsibility for change. At the team level, transformational leadership is positively related to a team climate of psycho-



logical safety, which in turn, is associated with higher levels of employee proactivity.

#### Limitations

Whilst particular care was taken to properly decompose multi-level variance and to reduce common method variance, the cross-sectional design precludes full causal conclusions on each level of analysis.

#### Research/Practical Implications

Results obtained emphasize the role of leadership as a multilevel predictor of future-focused and change-oriented behaviour of employees. Thus, the development of transformational leadership competencies appears to be an essential factor for assuring long-term success especially in organisations facing high levels of uncertainty and growing dynamics.

#### Originality/Value

This study extends previous research by focusing on the multilevel effects of transformational leadership on employee proactivity while also exploring several theoretically relevant mediators of these effects.

## Leader Morality and Traits in Today's Organizations

Chairs: *Annebel H.B. De Hoogh (Univ. of Amsterdam)* [a.h.b.dehoogh@uva.nl](mailto:a.h.b.dehoogh@uva.nl), *Deanne N. Den Hartog (Amsterdam Business School)* [D.N.denHartog@uva.nl](mailto:D.N.denHartog@uva.nl)

#### State of the Art

In recent years two areas in the leadership domain stand out as particularly challenging and in need of research, namely leader morality and leader ability to deal with upcoming technology. First, due to ethical lapses at the top of organizations, the moral fiber and character of leaders is at the forefront of everyone's attention. Unfortunately, many leaders seem to function without a fully formed moral compass and seem to get ahead due to their

high Machiavellianism or narcissism. As a consequence, individual followers, teams, and organizations experience the negative consequences of the actions of their leaders. In contrast, leaders who are perceived to act conform moral standards, for instance, ethical leaders, tend to have followers who are more satisfied, committed and more likely to exert extra effort. Second, how we organize work is drastically changing, for example, increasingly people work together across boundaries of space and time (e.g., virtual teams), but research has yet to focus on the role of leader traits in these conditions. Thus, we know too little about leader characteristics that are crucial for effective (moral) leadership in current times.

#### New Perspective/Contribution

The proposed symposium aims to explore these issues and brings together new research on leader morality and traits necessary in today's organizations. The individual papers include work that focusses on leader traits, follower characteristics and cognitive as well as affective processes.

#### Conclusion and Implications for Research/Practice

Together, the papers show how leader characteristics play a crucial role in leading modern and changing organizations.

### ***Presentations of the Symposium***

#### **Leader moral behavior and development: Taking stock and setting the stage**

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#### State of the Art

Spurred on by recent accounts of blatant misconduct in organizational settings, interest in the general field of business ethics, moral behavior and leader fairness has greatly inten-

sified. This research has shown that the extent to which leaders display ethically grounded behavior may prove valuable for the welfare of all those involved (Brown, Trevino, and Harrison, 2005). Yet, a comprehensive model of leader moral behavior that also offers guidance for research on *how* leaders can morally develop has been missing.

#### New Perspective/Contribution

This presentation offers such a theoretical framework and presents testable propositions. Our theoretical analysis identifies leader moral cognition and leader moral emotion as key determinants of leader moral behavior. After discussing potential moderators (i.e., moral identity, temptation, contextual clarity) of the identified determinants, we discuss how leader moral behavior can be advanced by explicitly focusing on how each of the model's sub-components can be developed.

#### Research/Practical Implications

Our theoretical presentation offers potential lines of research not only for the study of moral cognition, but also for the study of moral emotions. Moreover, we suggest that although all sub-components of our leader morality model are suitable candidates for development, empirical research on the matter is largely lacking.

#### Originality/Value

Given the evident importance of leader moral behavior, the value of the present theoretical framework lies in the attempt to provide a theoretical analysis of the topic and to identify potential fruitful avenues for its development.

### **The toxic combination of Machiavellian leaders and Machiavellian followers**

*Deanne N. De Hartog (Amsterdam Business School) [D.N.denHartog@uva.nl](mailto:D.N.denHartog@uva.nl), Frank D. Belschak (Amsterdam Business School), Rabiah S. Muhammad (Univ. of Maryland, College Park)*

#### Purpose

Machiavellians (Machs) are manipulative and show both cooperative and coercive strategies in goal pursuit. Mach leaders are self-centered, but adept at influencing employees. Mach employees also manipulate and exploit others for their own gain, yet what occurs when these employees are forced to follow a Mach leader with the same negative, manipulative disposition? We argue that Mach followers are generally likely to exhibit higher strain (stress), lower trust and more retaliatory behavior and that this will be exacerbated when they have Mach leaders. Thus, we test how Mach affects employees and whether combining leader and employee Mach is toxic.

#### Design/Methodology

To test our hypotheses, we conducted a multi-source survey field study among 197 dyads (employees and their leaders) working in different companies and industries.

#### Results

Results support the main effects of leader and follower Mach for trust and retaliatory behavior, but not for stress. They also support two of the proposed interactions: When a Mach follower had a Mach supervisor, their trust significantly decreased. Also, for Mach employees, having a Mach supervisor significantly increased their level of stress. For retaliatory behaviors we only found main effects of leader and follower Mach.

#### Limitations

The study used a cross-sectional design. Experimental or longitudinal research could strengthen conclusions.

#### Research/Practical Implications

Mach leaders and Mach followers can be a toxic combination.

#### Originality/Value

This paper contributes to the literature by investigating the interaction of leader and

follower traits and specifically examines the detrimental effects of the toxic combination of Mach leaders and followers.

### **The perceived effectiveness of narcissistic leaders and leader-follower gender**

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#### **Purpose**

Researchers have obtained inconsistent results on the relationship between leader narcissism and leader effectiveness evaluations. On the positive side, narcissists possess traits, such as confidence and dominance, people tend to look for in a leader. However, on the 'dark' side, narcissists are also seen as arrogant, egocentric, ruthless and even hostile. Here we draw on social role theory and recent findings on prescriptive gender stereotypes to propose that leader's and follower's gender influence the degree to which narcissistic leaders are perceived as effective. Narcissistic female leaders lack stereotypically gender appropriate qualities (e.g., kindness) and demonstrate undesirable qualities associated with the other gender (e.g., arrogance). This combination is potentially threatening to the traditionally higher status of males, thus resulting in poor leader effectiveness ratings, especially by male subordinates. Conversely, we expect narcissism to be tolerated in male leaders.

#### **Design/Methodology**

We conducted a multi-source field study with 125 dyads of managers and their subordinates working in different organizations.

#### **Results**

Female narcissistic leaders were seen as less effective than male narcissistic leaders when male subordinates served as raters. Female subordinates showed no gender bias in their

effectiveness evaluations of narcissistic leaders.

#### **Limitations**

As with all cross-sectional survey data, conclusions about the direction of causality cannot be tested.

#### **Research/Practical Implications**

Our research suggests that gender differences may be an important source of inconsistencies in evaluations of narcissistic leaders.

#### **Originality/Value**

The present research contributes to the literature by providing a first examination of how gender may affect the perceived effectiveness of narcissistic leaders.

### **A moral information processing perspective on ethical leadership**

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#### **Purpose**

The present study proposes a moral information processing perspective on ethical leadership that holds that individual difference variables associated with greater follower attention and openness to ethics-related information moderate the relationship of ethical leadership and follower extra effort. We theoretically develop and test two specific hypotheses derived from this proposition focusing on both an affective individual difference variable, moral emotions, and a cognitive individual difference variable, mindfulness.

#### **Design/Methodology**

To test our hypotheses, we use a multisource survey study with 135 leader-follower dyads from an international high technology company.

### Results

In line with our expectations, findings show that ethical leadership is more strongly related to follower extra effort at higher levels of follower moral emotions and higher levels of follower mindfulness.

### Limitations

Due to practical concerns of the company hosting our study, we could only obtain cross-sectional data which does not inform us about the causal sequence implied by our research model.

### Research/Practical Implications

The present study extends a clear invitation to future research to further develop the moral information processing perspective to advance our understanding of influences that may render ethical leadership more effective. The most direct practical implication of the current focus on individual differences would be in terms of follower selection and assessment.

### Originality/Value

The current study builds new theory in the form of a moral information processing perspective on ethical leadership and informed by this perspective identify individual differences variables that moderate the relationship of ethical leadership with extra effort.

## Leader emergence in virtual teams: The role of the Big 5

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*(Rochester Institute of Technology)*

### Purpose

Although the Big 5 personality traits are well-established as predictors of leadership and leader emergence in traditional, face-to-face teams, their roles in leader emergence in virtual teams are less well understood. As such, we investigated the roles that Extraversion

and Conscientiousness play as underlying factors for leadership in a virtual environment, hypothesizing that they have indirect, positive relationships with leader emergence. Further, although Agreeableness is generally not such an important factor in leader emergence in traditional teams, we hypothesized that it has an indirect, negative relationship with leader emergence in virtual teams.

### Design/Methodology

To test these hypotheses, we sampled 28 teams of 4-6 undergraduate students (N=152) with each team being split between students in the United Kingdom and the United States. Teams were required to communicate via a team wiki. Ratings of the Big 5 were collected via survey from the students. Ratings of leader emergence and objective intermediate variables (number of page creations and page edits) were collected from expert ratings based on information from the wiki.

### Results

Regression analyses generally supported all hypotheses.

### Limitations

Big 5 data were not collected from all participants. Results should be replicated in samples other than students.

### Research/Practical Implications

Results indicate that Big 5 traits do play a distal role in leader emergence in virtual teams, but that the specific virtual behaviors of leaders are more proximal.

### Originality/Value

To our knowledge, our study is one of the first to examine the role of leader traits in leader emergence in virtual teams.

## Participation and Distribution of Leadership in Organizations

Chairs: *Thomas S. Jønsson (Univ. of Aarhus, DK)* [thomasj@psy.au.dk](mailto:thomasj@psy.au.dk), *Christine Unterrainer (Univ. of Innsbruck, AT)* [Christine.Unterrainer@uibk.ac.at](mailto:Christine.Unterrainer@uibk.ac.at)

### State of the Art

Organizational participation and distribution of leadership designate sharing of influence, responsibility and leadership between top and bottom positions within organizations. The bottom-up perspective is deeply rooted in the history of WO psychology with mile stones such as Hawthorne, Socio-Technical Systems, Humanistic Management. The interest from psychology has been to understand the attitudinal and behavioral processes that unfold within these contexts. Findings generally suggest that these complicated processes are far from fully understood (Freeman, 2007; Kruse, 2002; Wagner et al., 1997). Contemporary developments within these practices comprise Distributed Leadership, Organizational Democracy and Team Work.

### New Perspective/Contribution

The present symposium focuses on empirical and theoretical contributions that will advance our understanding of antecedents and outcomes of organizational and team level employee participation and distributed leadership. Two main categories of psychological phenomena are in focus; 1) agency – manifest actions or related beliefs, such as efficacy, proactivity, team psychological safety, and 2) attitudes of involvement, such as psychological ownership, pro-social and pro-team orientations, and counterparts like cynicism and neglect. These categories broaden the scope of phenomena of interest in relation to participation and leadership from previous studies that predominantly focuses on job satisfaction and performance. With this perspective the symposium investigates psychological foundations for collective integration and action that may be essential in the understanding of how

human beings interact with their milieu in a wider context of influence sharing organizational structures.

### Conclusion and Implications for Research/Practice

The reported topics, measurement and findings may inspire both researchers and practitioners that desire to work with new perspectives of participation and distributed leadership.

### *Presentations of the Symposium*

#### **Empirical research on organizational democracy: What we know and where we should go!**

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### State of the Art

We report results and implications of a concurrently conducted, interdisciplinary and comprehensive review of empirical studies on Organizational Democracy (OD) and its association with psychological phenomena. OD refers to broad-based employee influence processes that are not ad hoc or occasional in nature. The majority of employees participate in the form of institutionalized decision-making on tactical or strategic decisions at the organizational level, either direct (within meetings/general assemblies) or indirect (through elected representatives). Additionally, employees often hold shares on equity capital (Wegge et al., 2010). Weber et al. (2008) presented a typology of democratic enterprises encompassing social partnership enterprises, non-collective vs. collective Kibbutz plants, employee-owned firms/co-operatives, democratic reform enterprises, and basis-democratic self-governed firms.

**New Perspective/Contribution**

We posit that most OD-studies focused on job satisfaction, motivation, involvement, and commitment, whereas other outcomes hypothesized in theoretical literature (e.g. collective psychological ownership, collective efficacy beliefs, spillover of democratic, pro-social orientations into the societal domain) are neglected.

**Research/Practical Implications**

Organizational behaviour research will benefit from considering consequences that affect not only the individual but also our society. Furthermore, we discuss possible mediators and moderators, both on individual and organizational level, in need for further investigation.

**Originality/Value**

Compared to less far reaching participative practices in conventional organizations, the psychological effects of OD in democratically structured enterprises are an under-researched issue. However, because there is no comprehensive review available until now, we will summarize systematically the existing empirical knowledge, identify weak points and gaps of previous research, and outline directions for future research.

### **The employees' participation in leadership tasks during organizational restructuring – The case of a hospital merger**

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**Purpose**

This ongoing project wants to examine the role of distributed leadership and employee participation during periods of major organizational restructuring. Until now research on distributed leadership and organizational participation has not been carried out in relation to major reorganizations. The study will apply the concept of human agency and effi-

cacy beliefs as the theoretical framework. This will provide opportunities to acquire new understandings of the interplay between different forms of agencies /efficacy beliefs and forms of leadership practices.

**Methodology**

The study will be accomplished at a big regional hospital in Denmark encompassing all of the around 4800 employees. We hypothesize that, in cases of organizational change and innovation, a high level of employee involvement and agency is needed both to ensure employee acceptance and to provide lasting effects. The data will be collected via documentary material and questionnaires, encompassing scales concerning the different forms of efficacy, participation, involvement in leadership and leadership practices.

**Results**

The study is longitudinal, but the first data collection will take place in October 2012 which will offer us opportunities to present results from these data. The results of the analyses to be presented will in particular include the importance of efficacy forms and participatory structures for the level and intensity of agency in the distributed leadership tasks.

**Originality/Value**

The results are expected to provide new conditions for the interplay management and employees in performing organizational tasks.

### **Shared leadership and proactivity, neglect, and cynicism: Evidences from Portugal and Brazil**

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**Purpose**

In the last decade, the interest in organizations for participative forms of leadership,



such as shared leadership, has increased. Adopting shared leadership is to assume that both leader and team members actively take part in the leadership of their team. Although evidences show that shared leadership impacts group behaviour, attitudes, cognition, and effectiveness positively (Pearce & Conger, 2003; Wegge et al., 2010), further research is called for in order to clarify its outcomes (e.g., Avolio et al., 2009). Thus, this study aims to contribute with evidences about outcomes of shared leadership, analysing its relation with proactivity, neglect and cynicism.

#### Design/Methodology

A self-report questionnaire was applied comprising shared leadership (operationalized in six shortened sub-scales – empowering, transformational, transactional, directive, aversive, and laissez-faire), individual task proactivity, organizational member proactivity, neglect and cynicism. The data were collected in Portugal (N=238) and in Brazil (N=221).

#### Results

It was expected that high levels of empowering, transformational, and transactional shared leadership increase significantly individual task behaviours and organizational member behaviours; and that high levels of directive, aversive, and laissez-faire shared leadership increase significantly cynicism and neglect behaviours. The results partially supported our hypotheses.

#### Limitations and Implications

Our results rely on self-reported measures and are cross-sectional. However, this study is the first to show that shared leadership is not only important regarding positive but also for negative behaviours.

#### Originality/Value

We contribute to shared leadership research by highlighting that shared leadership has both a constructive and a destructive side.

### **Relationships among vertical empowering leadership, shared leadership, team potency, and team performance**

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#### Purpose

Increasing attention has been devoted to the leadership processes within a team. Shared leadership describes influence and leadership as a collective, mutual activity emerging among team members. Thus, instead of relying solely on the team leader for leadership, shared leadership allows for team members to contribute equally in the team. The purpose of this paper is to investigate the potential moderating effects of vertical empowering leadership on the relationship between shared leadership and team potency. Moreover, we examined relationships among shared leadership, team potency, and team performance.

#### Design/Methodology

We administered a survey among 81 teams in a Danish company (N=582).

#### Results

Results of the analyses confirmed that shared leadership predicted team potency ( $\beta=.48^{***}$ ) that again predicted increased team performance ( $\beta=.23^{**}$ ). Moreover, vertical empowering leadership positively moderated the relationship between shared leadership and team potency ( $\beta=.11^{**}$ ) such that teams who experienced their team leader as empowering concomitantly experienced higher levels of team potency.

#### Limitations

The study took place at one time in a single Danish organization. Therefore, without evidence from further research, direct causation cannot be inferred, and care must be taken in generalizing the results.

**Research/Practical Implications**

The study indicates that even though shared leadership emerges in a team, there is a continuous need for external empowering leadership in order to increase team members' confidence in each other and in their teams' collective ability to execute actions required to perform successfully.

**Originality/Value**

To our knowledge, our study is the first to demonstrate the significance of empowering team leader behaviors in relation to shared leadership processes.

**How psychological safety develops in teams**

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**Purpose**

Team members feel psychologically safe in their team when they believe their skills are valued and problems can be addressed whenever they arise (Edmondson, 1999). Psychological safety increases learning behavior and team performance (Edmondson, 1999; Schaubroeck, Lam & Peng, 2011). But how does it develop and which antecedents does it have? For appropriate recommendations about how and when to intervene to improve psychological safety, we examined how team composition variables (attitude towards teamwork, self-assessed skills, the Big Five) predict initial levels and change of psychological safety in teams over the course of a project.

**Design/Methodology**

Fifty four student teams (with 3-5 members each) worked together on a research project over five months. Team composition variables were measured at the beginning of the project via questionnaire. Team psychological safety was measured at the beginning, middle and

end. We used multilevel modeling to predict initial levels and change of psychological safety.

**Results**

Initial levels of psychological safety were only predicted by team members' attitudes toward teamwork. Changes in psychological safety were only predicted by team members' skills: The higher their skills, the more psychological safety decreased. Team composition regarding the Big Five did neither predict initial levels nor changes.

**Limitations**

The study should be replicated with different kinds of teams in various organizational contexts.

**Research/Practical Implications**

At a team's first meeting, it is important to foster team members' positive attitudes towards team work to induce high levels of psychological safety.

**Originality/Value**

We used a longitudinal design and analyzed data using multilevel modeling. Implications for team coaching and development processes are discussed.

**Participation in the reporting of errors and adverse events in healthcare organizations: Individual, organizational, and technical determinants**

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**Purpose**

Many healthcare organizations have begun to implement measures that allow employees to participate in the process of improving patient safety, e.g., by reporting errors and adverse events. However, it is unknown which re-

quirements need to be fulfilled so that employees actively take part in this process. The objective of this study is to identify which individual, organizational, and technical determinants have the highest impact on employees' use of reporting measures.

#### Design/Methodology

Sponsored by the German Society of Neurology, the study sample consists of German neurological clinics. Two self-report questionnaires assess individual and organizational determinants of staff reporting behavior. A third questionnaire is used as an objective measure to assess reporting structures.

#### Results

Data has been collected in 9 clinics (N = 546) and will proceed until early 2013 for a final sample of 20 clinics. Exploratory analysis indicates an important influence of supervisor expectations on reporting behavior, suggesting that participative leadership plays a key role for improving patient safety.

#### Limitations

The study has a cross-sectional design and is limited to a single medical discipline (neurology).

#### Research/Practical Implications

The findings extend knowledge on participatory processes in healthcare organizations and aid the development of patient safety interventions.

#### Originality/Value

For the first time, the relationship between individual characteristics of employees (ethics), organizational prerequisites (leadership, climate), as well as technical factors (structures) and reporting behavior is investigated conjointly.

## Current Perspectives on Relationship-Oriented Leadership and Leader-Member Exchange (LMX)

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#### State of the Art

Although leadership research has long been dominated by leader-centric approaches, the leader-member exchange (LMX) approach as one relationship-oriented approach to leadership has drawn a lot of research interest as well (Uhl-Bien, 2006). In a recently published meta-analysis, Dulebohn et al. (2012) found strong evidence for LMX predicting important outcomes like job satisfaction, organizational commitment, or OCB.

#### New Perspective/Contribution

In this symposium, we discuss current studies taking different perspectives on LMX. From the perspective of follower perceptions, Topakas, Martin, and Epitropaki investigate whether the leaders' congruence to followers' implicit leadership theories relates to higher levels of LMX and whether LMX mediates the relationship between ILT congruence and desirable outcomes. The study of Pundt and Herrmann provides insight into the role different styles of the leaders' humor might play in developing LMX relationships. Schyns and van Veldhoven adopt a situational perspective and report a study on the relationship between span of control and LMX, answering the question whether there might be a capacity limit for leaders in developing LMX relationships with their followers. Gonzalez-Roma and Le Blanc investigate what happens when leaders differentiate relationship qualities between the single followers of a working team and how this differentiation is related to team-climate and outcome variables.

## Conclusion and Implications for Research/Practice

The studies discussed in this symposium provide a deeper insight into the development and situational constraints of LMX. Taking into account follower perceptions, situational circumstances, and team characteristics might fruitfully guide future research.

## ***Presentations of the Symposium***

### **The central role of Leader-Member Exchange (LMX) in the relationship between follower perceptual processes and leadership outcomes**

*Anna Topakas (Institute of Work Psychology, Univ. of Sheffield, UK) [a.topakas@sheffield.ac.uk](mailto:a.topakas@sheffield.ac.uk), Robin Martin (Aston Business School, Aston Univ., UK), Olga Epitropaki (ALBA Graduate Business School, GR)*

#### Purpose

The paper investigates whether LMX mediates the relationship between Implicit Leadership Theories (ILT) congruence and individual and group outcomes. ILT congruence refers to the similarity between followers' ILTs and the recognition of these traits in their leader. The model builds on causal models already explored in the literature (Engle & Lord, 1997; Epitropaki & Martin, 2005) and extends them to include further outcomes and group-level effects.

#### Design/Methodology

Three studies examined the proposed model. The first was cross-sectional with 175 students reporting on work experience during a 1-year placement. The second was longitudinal with a sample of 343 students engaging in a business simulation in groups with formal leadership. The final study was a cross-sectional survey in several organizations with a sample of 178. Advanced statistical techniques (Latent Congruence Modeling) were employed in an

effort to resolve the problem of conflicting findings reported in past research.

#### Results

LMX mediates the relationship between ILT congruence and outcomes at the individual (self-rated performance, job satisfaction, well-being, conflict, commitment) and group (task satisfaction, conflict, group satisfaction, team realness, team-member exchange, performance) level.

#### Limitations

Limitations relate to sample sizes and compositions, and considerations regarding the appropriateness of ILT measurement at the group level.

#### Research/Practical Implications

Research needs to explore further the group dynamics involved in leadership perceptions in relation to LMX and outcomes. Practical implications relate to leader recruitment, selection, training, and development.

#### Originality/Value

This paper adds the 'group dimension' to our understanding of how ILTs affect LMX, and explores effects on unexplored outcomes (e.g., performance).

### **Humor and the relationship between leader and follower: How are humor styles of the leader related to leader-member exchange?**

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#### Purpose

We investigate the relationship between different styles of humorous leader behavior and the quality of relationship between leader and follower in terms of leader-member exchange (LMX). Furthermore, we investigate identification of the leader as a potential mediator for this relationship.

### Design/Methodology

We conducted a questionnaire study with two measurement points with a time lag of 6 weeks. Overall, 152 employees rated their immediate leader in different humor styles as well as LMX and their identification with the leader.

### Results

We found a positive humor style of the leader rated in T1 to be positively related to LMX in T2, even after controlling for LMX in T1, whereas aggressive humor was negatively related to LMX in T2. Self-defeating humor was not related to LMX. Identification with the leader was a mediator for the relationship between positive humor of the leader and LMX.

### Limitations

Although the analyses we conducted allow for testing mediation hypotheses with two measurement points, our results would have been stronger with three measurement points.

### Research/Practical Implications

Our results contribute to the understanding of what leader behavior might contribute to a positive professional relationship between leader and follower as well as to the understanding of the respective processes. Future studies should test the relationships we found in longitudinal studies as well as in lab experiments.

### Originality/Value

Our study is among the first testing the relationship between humorous leadership and LMX. Moreover, our study is among the first taking into account different humor styles when investigating humorous leadership.

## **The relationship between LMX dimensions and span of control – Linear or non-linear?**

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### Purpose

Leaders may not have enough resources to establish and maintain good relationship qualities with all followers when they lead large groups. However, in previous studies such effects were small and somewhat inconsistent (Schyns & Blank, 2010).

### Design/Methodology

Drawing on data from studies in the Netherlands and Germany, among 703 employees in 193 teams, we investigated the possibility of linear and non-linear relationships, using a multi-dimensional instrument to assess LMX (Liden & Maslyn, 1998).

### Results

We found span of control to be differentially related to some but not all LMX dimensions. Affect and contribution are unrelated to span of control. We found significant negative linear associations for loyalty and professional respect. For loyalty we also found a significant non-linear effect.

### Limitations

Ideally, a more extensive set of existing studies would be available for this secondary analysis, from a larger range of countries as well as research contexts.

### Research/Practical Implications

Professional respect decreases with larger span of control. This could be due to a perception effect, such as an “us and them” perception, as in larger groups the leader is more removed from the group members’ profession. For loyalty, there is an indication for an optimum span of control. This could be due to higher expectations in small groups and to less visibility of loyal acts in larger groups.

### Originality/Value

Improving LMX is important for employees, leaders and organizations alike. Such improvement might need to take span of control better into account.

### **The influence of Leader-Member Exchange differentiation on teams' satisfaction: The mediating role of support climate**

Vicente Gonzalez-Roma (Univ. of Valencia, ES) [vicente.glez-roma@uv.es](mailto:vicente.glez-roma@uv.es), Pascale Le Blanc (Eindhoven Univ. of Technology, NL)

#### Purpose

A key element of Leader-Member Exchange (LMX) theory is LMX-differentiation (the degree of distinct LMX-relationships within a team). However, empirical research on the role of LMX-differentiation is still scarce. Previous research has shown that the LMX-differentiation is related to important team outcomes. However, we know very little about the variables that mediate this relationship. Consequently, it is theoretically important to understand the mechanisms involved. Thus, the purpose of this study is to test whether a team climate of support mediates the relationship between LMX-differentiation and work-teams' satisfaction.

#### Design/Methodology

The study sample was composed of 33 Primary Health-Care-Teams. Data were collected at three time points, with a 1-year lag between successive times. The study's mediation hypothesis was tested by means of regression analysis.

#### Results

The results showed that, after controlling for aggregate LMX-quality, LMX-differentiation at time 1 was negatively related to teams' support climate at time 2, which in turn was positively related to teams' satisfaction at time 3. The indirect effect of LMX-differentiation on

collective satisfaction was statistically significant.

#### Limitations

The main limitation of this study is that all the data were collected from the same source (team members). However, to reduce the influence of common-method variance, the study variables were collected at different time points.

#### Research/Practical Implications

The results help us to understand the important role that LMX-differentiation plays in teams. From a practical perspective, they inform team leaders about the dysfunctional consequences of LMX-differentiation.

### Originality/Value

This study shows some of the mechanisms involved in the relationship between LMX-differentiation and team outcomes.

## **Perspectives on Leadership II: Effectiveness, Diversity and Wellbeing**

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Facilitator: Jörg Felfe (Helmut Schmidt Univ. Hamburg, DE) [felfe@hsu-hh.de](mailto:felfe@hsu-hh.de)

#### State of the Art

The second part of this symposium includes four presentations from four different universities in two countries and focuses on the relationship between leadership and follower wellbeing. Leadership has been demonstrated to be a major factor for follower wellbeing in previous studies. Transformational leadership, for example, has been found to have health-promoting effects. However, effect sizes vary and integrating studies are needed. Facing the



diversity of team members in many organizations today, leadership behavior has to be adapted to the needs of unlike followers.

#### New Perspective/Contribution

The first study by Vincent et al. provides metaanalytic results regarding the relation between transformational leadership and wellbeing. Second, the study by Perko et al. investigates the relation between transformational leadership and different indicators of wellbeing in a longitudinal study of Finnish public sector employees applying latent class analysis. The third study by Holstad et al. aims to broaden the perspective and includes the leader's work characteristics as predictors of followers' wellbeing in a longitudinal study. Finally, Jungmann et al. present research on a leadership training program for age diverse teams. Facing demographic change this is a topic of superior practical relevance.

Jörg Felfe will integrate the different contributions as a discussant.

#### Conclusion and Implications for Research/Practice

The contributions in this symposium integrate existing research but also point out new directions for researchers within the area leadership and wellbeing. All four contributions suggest different practical implications to enhance wellbeing in organizations including leadership training and job crafting. Moreover, followers' diversity must be taken into account.

### ***Presentations of the Symposium***

### **The relation between transformational leadership and employee well-being: A meta-analysis**

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#### Purpose

For decades of leadership research, subordinates' health has not been frequently investigated as a relevant factor for leadership effectiveness. Factors like productivity, employee job motivation, and job satisfaction appear as definitions of successful leadership. However, in recent years we observe a growing interest in analyzing the impact of leadership behavior on employees' health and well-being. This is reflected by a tremendous increase of publications on this topic in the last five years. Three reviews on leadership and employee well-being come to the conclusion that it remains still unclear in what ways and to what extent leaders influence the health of their employees. In the current research on leadership and well-being, the concept of transformational leadership has received considerable attention and has been the factor most frequently linked to positive and negative aspects of employee well-being, compared to other leadership theories.

#### Design/Methodology

We conducted a meta-analysis in order to gain knowledge about the effect sizes regarding the relation between transformational leadership and indicators of negative well-being (e.g. burnout) and positive well-being. In order to control for a possible publication bias we also included non-published data of more than 3.000 employees.

### Results

The findings indicate that it is important to extend previous leadership approaches to get a clearer understanding of how leadership and health are related and which specific leadership behaviors are health-relevant.

### Research/Practical Implications

Theoretical considerations concerning future research and practical implications for supervisors are discussed.

### Profiles of long-term occupational well-being: associations with transformational leadership

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### Purpose

The aim was to (1) identify long-term profiles of occupational well-being (in terms of work engagement and emotional exhaustion) and (2) to examine differences in transformational leadership ratings between these profiles across a 1-year period.

### Design/Methodology

The questionnaire study was conducted among 207 Finnish municipal employees. We used Latent Profile Analysis (LPA) to identify profiles (i.e., latent classes) of employees with similar mean levels and mean level changes of work engagement and emotional exhaustion. After that, transformational leadership ratings were compared between these classes with ANOVA for repeated measures.

### Results

Preliminary results support the solution for four latent classes: one indicating good well-being in terms of both well-being scales (51% of the participants), one with an unfavorable change trend on both well-being scales (9%), one with an average range of well-being (19%), and one showing both work engagement and exhaustion on a relatively high level

(21%). An interaction effect between class and time was found: In contrast to all other groups, the group with an unfavorable change trend in well-being indicated decreasing transformational leadership behaviors.

### Limitations

The study is based on self-ratings and reveals only concurrent relationships between leadership behavior and well-being.

### Research/Practical implications

A risk group of a lowering trend in well-being associated with decreasing transformational leadership behaviors was identified. The study highlights the role of transformational leadership behaviors in promoting employee well-being.

### Originality/Value

Using a person-oriented approach, the present study revealed subgroups of employees with different development of work engagement and emotional exhaustion across one year.

### The leader's job characteristics – Antecedents of followers' wellbeing?

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### Purpose

In recent years the impact of leadership behavior on followers' wellbeing has received increased attention revealing a number of mediators of the relationship. The present study aims to broaden the perspective to include determinants of the leader's behavior as predictors of follower wellbeing: The leader's work characteristics, namely role clarity, autonomy, workload, and work-family conflict.

**Design/Methodology**

A sample of 488 employees assigned to 101 teams and their leaders participated in a longitudinal multi-level study in Germany. Leaders and followers rated their work characteristics at T1 while followers additionally indicated their level of emotional exhaustion and irritation. One year later followers once again rated their level of irritation and emotional exhaustion.

**Results**

Results revealed that the leaders' autonomy at T1 negatively impacted followers' emotional exhaustion and irritation at T2. Contrary, work-family conflict at T1 positively predicted followers' emotional exhaustion and irritation at T2. Both models controlled for followers' work characteristics and followers' level of emotional exhaustion and irritation at T1. The leader's role clarity and workload did not predict follower wellbeing.

**Limitations**

Reverse causation cannot be ruled out as no cross-lagged effects were tested.

**Research/Practical Implications**

Based on these results we call for more research assessing leaders' work characteristics as antecedents of follower wellbeing. In addition to changing leadership behavior practitioners are encouraged to engage in job crafting in order to enlarge leaders' autonomy and to reduce the antithesis between work and family.

**Originality/Value**

The present study recognizes the importance of the leaders' work characteristics for follower wellbeing.

**Age differentiated leadership**

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**Purpose**

Demographic change alters the age-composition of the workforce, resulting in more old workers and increasingly age diverse teams. Thus, managers are required to change their mind-sets regarding ageing and learn new leadership skills. To support this challenge, we developed a new training for supervisors that seek to improve attitudes towards older employees and team performance in age diverse teams. Moreover, we developed a new short questionnaire (FAF 16) that gives leaders feedback regarding their age-differentiated leadership behavior.

**Design/Methodology**

The training for age diverse teams (Wegge et al., 2012a) was evaluated with 47 supervisors (221 employees) working in tax-offices. Supervisors were split into a training group (23 supervisors, 109 members) and a control group (24 supervisors, 112 members). The FAF 16 (Wegge et al. 2012b) was employed in two other samples (192 nurses and 106 production workers).

**Results**

The training had an impact on several variables four months later, indicating decreased salience of age differences, increased appreciation of age diversity and reduced age stereotypes. For the FAF 16 we found that young and old employees who perceive their supervisors to lead in an age-differentiated manner are much more satisfied with their work, have less burnout, emotional conflicts, turnover intentions and higher self-efficacy.

**Limitations**

It remains to be seen how our training and the FAF 16 can be used in other fields.

**Research/Practical Implications**

Nevertheless, the findings show that both instruments are useful. Using these tools, managers can master the challenging tasks that are raised by demographic change.

## New Adventures in Negative Leadership: Measurement, Antecedents, Consequences and Moderators

Chairs: *Daniel May (Freie Univ. Berlin, Berlin, DE)*  
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### State of the Art

Negative forms of leadership (NL) have drawn increasing scholarly attention within the last couple of years, and evidence on their destructive impact on follower attitudes and behavior is growing (Schyns & Schilling, in press). Yet, the field is still in a nascent state, calling for further research and integration. Consequently, the present symposium addresses two eminent questions: the further elaboration of 1) contents and dimensionality of NL as well as of 2) antecedents, consequences and moderators of NL.

### New Perspective/Contribution

1) Schilling and Loock present evidence for the reliability and validity of a German version of the abusive supervision scale (Tepper, 2000), also indicating that the originally unidimensional concept may be separated into two related subdimensions. May and Meier propose a revised version of Shaw et al.'s (2011) destructive leadership questionnaire and provide data on factor structure and validity. Schmid and Peus introduce a newly developed measure of exploitative leadership and report on its psychometric properties.

2) Martins and Nerdinger address how LMX predicts daily appreciative and abusive leader behaviors and how these in turn mediate the relationship between LMX and followers' work-related outcomes. Finally, Velez and Neves present evidence that follower assertiveness and job resource adequacy moderate the relationship between NL and follower perceptions of distributive justice.

### Conclusion and Implications for Research/Practice

Further elucidating NL's contents and dimensions as well as its modes of action does not only provide us with a finer-grained picture of this highly relevant concept, but can ultimately help to devise effective strategies to curb NL's detrimental effects.

## ***Presentations of the Symposium***

### **A German version of Tepper's abusive supervision scale: Evaluation and future developments**

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#### Purpose

While there is a growing amount of research on abusive supervision in the US, it is still a rather new topic in European organizational psychology. The purpose of the paper is to present the evaluation of a German version of Tepper's (2000) abusive supervision scale.

#### Design/Methodology

The evaluation of the scale has been conducted in field survey of 223 employees from different industries who rated the leadership behavior of their respective supervisor, their own personality as well as job-related criteria.

#### Results

The German version of the scale is able to reliably measure abusive supervision. Item analysis produces results similar to the original English version. Exploratory factor analysis suggests a main factor (with two correlated subdimensions) which can be separated from other leadership constructs (transformational and laissez faire leadership). Abusive supervision as measured by the German version is significantly related to personality traits of the respondents (i.e. neuroticism) as well as to

important job-related criteria (i.e. commitment, stress, turnover intention).

#### Limitations

The generalizability of the results is (potentially) limited by the fact that all data were collected from the same source and that the study is cross-sectional in nature.

#### Research/Practical Implications

The German version of the abusive supervision scale can be used for both research studies as well as organizational diagnosis to analyze the prevalence, causes and consequences of supervisor abusive behavior.

#### Originality/Value

The development of the German abusive supervision scale fills an empirical gap and allows us to extend research on supervisor hostility to the European context.

### **Measuring negative forms of leadership: Preliminary evidence for factor structure and criterion validity of a revised version of Shaw, Erickson and Harvey's (2011) destructive leadership questionnaire**

Daniel May (Freie Univ. Berlin, Berlin, DE) [daniel.may@fu-berlin.de](mailto:daniel.may@fu-berlin.de), Felix Meier (Freie Univ. Berlin, Berlin, DE)

#### Purpose

This contribution introduces a revised version of Shaw, et al.'s (2011) destructive leadership questionnaire and presents first results on factor structure as well as criterion validity.

#### Design/Methodology

Based on item and scale characteristics reported by Shaw et al. (2011), a representative set of 63 leader behavior items was chosen from the original 104 item pool. A German version of these items (obtained through a translation/back-translation process) was administered to a sample of 195 part- and fulltime employees.

#### Results

Principal components analysis suggests a 3-factor solution based on a final set of 49 items, capturing *autocratic/abusive behavior (AAB)*, *poor management (PoM)* and *inadequate communication of expectations (ICE)*. With regard to criterion validity, results indicate that follower ratings of AAB predict counterproductive work behavior, while AAB and PoM predict satisfaction with the supervisor and with working conditions. Generally, these effects also hold when controlling for perceptions of Transformational Leadership. ICE on the other hand did not relate to any of the outcome criteria.

#### Limitations

Sample size is small for exploratory factor analysis and validity tests rely on concurrent data only.

#### Research/Practical Implications

Further confirmation of the factor structure and validity of the revised instrument is needed, particularly with regard to ICE.

#### Originality/Value

Clarifying the dimensionality as well as proper measurement of negative forms of leadership are vital for the further development of the research field. By proposing a refined and more economic version of Shaw et al.'s (2011) destructive leadership questionnaire, the present contribution adds to both of these goals.

### **Exploitative leadership: Theory and measurement of exploitative leadership behavior**

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#### Purpose

Research on negative aspects of leadership has flourished lately, pointing to the substantial negative impact on employees (Schyns & Hansbrough, 2010). Dominant constructs in-

clude abusive supervision, petty tyranny or destructive leadership (Thoroughgood et al., 2012). However, those do not cover the full range of negative leader behaviors. An important aspect is followers' exploitation by the leader (May et al., in prep.). To close this gap, we focused on this aspect and developed a scale measuring exploitative leadership.

#### Design/Methodology

We surveyed 204 employees from various branches of business in Germany using standardized questionnaires.

#### Results

Confirmatory analysis revealed that the scale had adequate factorial validity as well as appropriate internal consistency. In terms of content validity results show that exploitative leadership was associated with other facets of negative leadership such as authoritarian leadership and abusive supervision. In turn, negative relations with servant and ethical leadership were revealed. Evidence for criterion-related validity is based on findings relating exploitative leadership to increased levels of counterproductive work behavior and lower self-ratings of performance effectiveness.

#### Limitations

Most notable are the small sample size and the use of self-rating scales.

#### Research/Practical Implications

The new scale represents a valid and reliable measure of a unique aspect of negative leadership that can be used in the area of leadership research and development.

#### Originality/Value

Exploitative leadership represents a new and distinct form of negative leadership and may enlighten an aspect that has previously not been examined. This first attempt to measure it empirically is an important step towards future research in the area.

### **Leader-member exchange in everyday leader-employee interactions. A diary study on the effects of appreciative and abusive supervision on employees' work-related outcomes**

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#### Purpose

Leader-member exchange (LMX) has been mainly examined as broad phenomenon, although it can be seen as the sum of many single experiences and impressions that employees have about or with their leaders. Studies about what leaders exactly do in everyday interactions with their subordinates to build up or foster relationships in terms of leader-member-exchange are rare. On the basis of current research on appreciation of leaders and abusive supervision behavior towards employees and its antecedents and effects, we assume direct relationships between LMX and supervisors' everyday appreciative and abusive behavior, and effects on employees' work-related outcomes (e.g. satisfaction, work engagement, emotional exhaustion).

#### Design/Methodology

To test these assumptions, we conducted a 5-days diary study with 20 employees with emphasis on quantitative questionnaires.

#### Results

Preliminary results of multilevel analyses support our hypotheses.

#### Limitations

External validity of our results is restricted due to the small and non-representative sample.

#### Research/Practical Implications

Research on LMX should continue integrating the facets of leaders' appreciation and abusive supervision behavior in everyday interactions between leaders and subordinated into LMX-theory.



### Originality/Value

Our study highlights the role of various interactions between leaders and subordinates in daily work, especially the importance of appreciative and abusive supervisors' behavior and its effects on the leader-subordinate-relationship and employees' work-related outcomes.

### Subordinates' coping with abusive supervision: The role of job resources adequacy and assertiveness

*Maria João Velez (Nova School of Business and Economics, Lisbon, PT) [mjpvelez@sapo.pt](mailto:mjpvelez@sapo.pt), Pedro Neves (Nova School of Business and Economics, Lisbon, PT)*

#### Purpose

Research interest in the destructive side of leadership has grown in the past 10 years. One of the most common definitions of negative workplace supervisor behavior is *abusive supervision*. So far, studies have generally interpreted abusive supervision based on the characteristics and personality traits of supervisors, and have mostly ignored the variability that exists between individuals and different contexts (Martinko et al., 2009). Thus, little is known about factors that could buffer the negative effects of abusive supervision.

#### Design/Methodology

Participants were 253 employees from a City Hall. The present study examines the moderating role of followers' job resources adequacy and assertiveness on the relationship between abusive supervision and follower experiences of distributive justice.

#### Results

Results indicate that the negative relationship between abusive supervision and distributive justice was significant when job resources adequacy was low, but not when it was high. Similarly, we found that the negative relationship between abusive supervision and distrib-

utive justice was significant when employees' assertiveness was low, but not when it was high.

#### Limitations

An important implication resulting from this research concerns the effectiveness of subordinates' characteristics and job resources for coping with abusive supervision, not viewing subordinates merely as passive subjects.

#### Research/Practical Implications

All data were collected from a common source (employees), thus we cannot exclude the possibility that common-method variance affected our results.

### Originality/Value

Our findings expand the content domain of abusive supervision research by examining the buffering effect of subordinates' characteristics and organizational resources on the impact of abusive supervision on distributive justice.

## Task and Social Leadership: Contributions from Power Research

*Chairs: Annika Scholl (Knowledge Media Research Center Tuebingen) [a.scholl@iwm-kmrc.de](mailto:a.scholl@iwm-kmrc.de), Melvyn Hamstra (Univ. of Groningen) [M.R.W.Hamstra@rug.nl](mailto:M.R.W.Hamstra@rug.nl)*

#### State of the Art

Recent leadership research has become increasingly interested in understanding the impact of social power. Power substantially alters behavior, at times facilitating or hindering power holders' and powerless individuals' effectiveness in attaining organizational goals. This symposium brings together findings on power and leadership that have implications for individual performance, successful collaboration between those high and low in power, and leadership outcomes.

### New Perspective/Contribution

Power fundamentally affects prioritization during individual goal striving by enhancing attentional focus (Talk 1). Extending this perspective from individual to collaborative tasks, power under certain conditions promotes self-critical reflection and learning from collaboration experiences (Talk 2). Despite these largely positive consequences for goal striving, those high and low in power may also face obstacles to trustful exchange and successful collaboration: Especially power holders are, at times, prone to believe they are only valued by others for their power (i.e., self-objectification, Talk 3) and fail to recognize their responsibility for others (Talk 4). However, these moral aspects of leadership behavior are crucial for leaders to ensure support among their followers (Talk 5).

### Conclusion and Implications for Research/Practice

Actual and subjectively experienced power alters behavior. The symposium promotes our understanding of both the mechanisms and conditions under which these effects facilitate performance, collaboration, and leadership effectiveness. The presented results thus provide a starting point for organizational interventions.

## ***Presentations of the Symposium***

### **Power and goal pursuit**

Ana Guinote (Univ. College London) [a.guinote@ucl.ac.uk](mailto:a.guinote@ucl.ac.uk), Alice Cai (Univ. College London)

#### Purpose

The present talk discusses effects of power on the pursuit of single and multiple goals. According to the Situated-Focus-Theory-of-Power (Guinote, 2007), power promotes focused attention in line with activated constructs. These selective information pro-

cessing strategies should facilitate prioritization. This hypothesis was tested.

#### Design/Methodology

We review research from our lab on power, goal accessibility, and attention. Four recent studies will then examine power and multitasking. Study 1 asked participants ( $N = 53$ ) to first recall a powerless, neutral, or powerful event (Galinsky et al., 2003), schedule activities, and complete goal scenarios. Study 2 examined actual multitasking. Participants ( $N = 54$ ) were assigned to powerful, neutral or powerless roles and subsequently completed 3 different tasks. Study 3 manipulated power and assessed task-switching abilities. Study 4 utilized managers and employees ( $N = 20$ ) and assessed self-reported ability to multitask. Study 5 examined planning ( $N = 40$ ).

#### Results

Analyses of variance showed that powerful participants perform better during the pursuit of single goals. When pursuing multiple goals, powerless participants switched more between goals than powerful participants. Powerful participants avoided multitasking but were better at multitasking. Power holders' tendency to prioritize lead, however, to the planning fallacy.

#### Limitations

More studies need to examine the ecological validity of our findings.

#### Research/Practical Implications

Power enhances goal pursuit; however, power holders need to be aware of goal neglect when pursuing multiple goals and of the planning fallacy.

#### Originality/Value

We examine for the first time in controlled conditions how power affects goal pursuit and multitasking.

### **When being powerful promotes questioning own actions**

*Annika Scholl (Knowledge Media Research Center Tuebingen) [a.scholl@iwm-kmrc.de](mailto:a.scholl@iwm-kmrc.de), Kai Sassenberg (Knowledge Media Research Center Tuebingen)*

#### **Purpose**

Critically reflecting on one's behavior is crucial to learn from mistakes and prepare subsequent action, in particular for power holders carrying responsibility for organizational goal attainment and others' wellbeing. The present research investigated the conditions promoting such reflection among those high (versus low) in power. Being in power promotes a sense of control and more effective adaptation to the situation at hand. We thus expected power holders to reflect more effectively on their actions (a) only if prior failure highlights the need to revise their strategies and (b) when actually having more control (e.g., choice or possibilities to change a negative outcome) than the powerless.

#### **Design/Methodology**

A field study ( $N=178$ ) and a set of experiments measured and manipulated power, respectively (e.g., leader or subordinate position). Reflection and learning were assessed under conditions of unknown vs. failure outcomes and low vs. high choice.

#### **Results**

ANOVAs and regression analyses supported the hypotheses. Power promoted self-critical reflection and learning, but only after failure. This effect disappeared under low choice.

#### **Limitations**

Our data only provide correlational evidence for learning from prior experience. Future research might directly investigate effects on subsequent performance.

#### **Research/Practical Implications**

The results suggest that power holders more effectively reflect (a) when needed and (b) if

their position does indeed afford them more possibilities for change (e.g., high choice).

#### **Originality/Value**

The present research contributes to our understanding of the preconditions fostering power holders' self-critical reflection, which is considered a key element of ethical leadership.

### **That power becomes you: When subordinate actions trigger self-objectification among the powerful**

*M. Ena Inesi (London Business School) [enesi@london.edu](mailto:enesi@london.edu), Sunyoung Lee (London Business School), Kimberly Rios (Univ. of Chicago)*

#### **Purpose**

In the current research, we propose that the powerful can be victims of self-objectification. Because power implies control over resources that are valued by others, power-holders come to believe that acts of kindness they receive are motivated by others' selfish desires to gain access to those resources. Self-objectification occurs when power-holders' belief that they are valued for their power becomes internalized.

#### **Design/Methodology**

Three experiments tested these hypotheses. In Study 1, high-power participants were more likely than others to define themselves on power-relevant traits, but only after a favor exchange. This was mediated by beliefs about why the favor was done. In Study 2, power-relevant traits were a stronger predictor of self-esteem for high-power compared to equal-power participants. After receiving a favor from a confederate, high-power participants in Study 3 were willing to pay more than other participants for goods that display high (but not low) status.

#### **Results**

Regression analyses and ANOVAs supported our predictions.

### Limitations

Our studies were all run in experimental settings. Therefore, we would like to replicate these ideas in field settings, using ongoing relationships and spontaneously offered favors.

### Research/Practical Implications

These results imply that power-holders' sense of self may become bounded by the trappings of their position, suggesting limited abilities to develop authentic relationships with their subordinates.

### Originality/Value

The current research suggests that self-objectification is not limited to low-power actors. Instead, those in high-power positions can also fall victim to this fate, and it is ironically triggered by the kind acts of their subordinates.

## Does considering others promote power holders' responsibility?

*Kai Sassenberg (Knowledge Media Research Center Tuebingen) [k.sassenberg@iwm-kmrc.de](mailto:k.sassenberg@iwm-kmrc.de), Annika Scholl (Knowledge Media Research Center Tuebingen), Naomi Ellemers (Leiden Univ.), Daan Scheepers (Leiden Univ.)*

### Purpose

During the recent financial crisis, the question why power holders took such high risks and seemingly did not consider their responsibilities has repeatedly been raised. In other words, power holders appeared to construe their power as opportunity for personal gain, but not as responsibility for others' situation. As a potential intervention, directing power holders' attention to others could facilitate the construal of power as responsibility, because responsibility means recognizing the impact of one's actions on others. However, directing attention to others might also make power holders more aware that others can be objectified as means to own goals thereby

reducing the construal of power as responsibility.

### Design/Methodology

To test these competing predictions, we conducted three experiments manipulating the salience of the self versus others (versus a control condition) and using different procedures before assigning participants to a powerful position. Afterwards, participants' construal of power, helping power motivation and misuse of power were assessed.

### Results

Results of all studies indicate that the salience of others reduces the construal of power as responsibility and promotes misuse of power.

### Limitations

The data does not provide insights about the underlying process yet, but additional data will be collected before the conference.

### Research/Practical Implications

Directing power holders' attention to others does not promote a construal of power as responsibility. Perspective taking or other means of rendering others' outcomes self-relevant seem to be necessary.

### Originality/Value

The results provide first insights about why power holders might overlook the responsibility connected to their power.

## Virtuous leadership: The importance of perceived leader morality for leadership endorsement

*Manuela Barreto (Univ. of Exeter) [M.Barreto@exeter.ac.uk](mailto:M.Barreto@exeter.ac.uk), Alex Haslam (Univ. of Exeter), Gary Kerridge (Univ. of Exeter), Syifaa' Mansor (Univ. of Exeter), Marco Rego (Univ. of Exeter)*

### Purpose

Leaders are only endorsed by group members when they are seen to embody the core val-

ues of the group (perceived prototypicality, e.g., Haslam, Reicher, & Platow, 2011). Perceived morality is one of those core values (Ellemers, Kingma, van den Burgt, & Barreto, 2011; Leach, Ellemers, & Barreto, 2007). This research brings these insights together by examining the link between perceived leader morality and prototypicality. We predicted that perceived leader morality (compared, e.g., to competence) is a primary predictor of perceived leader prototypicality, which determines leader endorsement.

#### Design/Methodology

Participants in two experimental studies (with slightly different methods) expressed their opinion about an ingroup leader who either failed vs. succeeded to be competent vs. moral.

#### Results

Analyses of variance showed that (in both studies) leaders who were described as immoral were seen as less group prototypical and were less endorsed than leaders who were described as moral and leaders who were described as incompetent.

#### Limitations

This work raises the question of what happens when information about leader morality and leader prototypicality is discrepant--this is currently being examined.

#### Research/Practical Implications

To secure followership, leaders must be perceived as moral.

#### Originality/Value

This is the first series of studies to examine the link between perceived prototypicality and morality as determinants of leadership endorsement.

## Motivational Aspects in Leadership Emergence and Career Development

Chair: *Sabine Korek (Univ. Leipzig)* [korek@uni-leipzig.de](mailto:korek@uni-leipzig.de)

#### State of the Art

Attention in career research has recently shifted towards motivational constructs. Based on Chan and Dracsgow's (2001) motivation to lead (MTL), researchers have advanced the idea of MTL to wider areas like entrepreneurial development or gender.

#### New Perspective/Contribution

This symposium gathers six contributions dealing with diverse motivational constructs in career development and investigates antecedents (e. g. personality) and consequences (e. g. leadership emergence, strain). In the first contribution, Felfe et al. present specific MTL patterns as predictors of leadership emergence and investigate romance of leadership as an antecedential factor. Secondly, Chan et al. enhance the MTL concept towards professional and entrepreneurial career aspirations and report validity data like relationships with personality or efficacy. Stiehl et al. add the idea of leadership avoidance to the MTL concept and investigate the role of MTL as mediator in linking personality traits and leadership intentions. The next two contributions take a gender perspective: Li et al. report lower values for women in MTL, which are accounted for by self-reported leadership efficacy. Hernandez Bark et al. investigate gender differences in power motives and suggest that power motivation and transformational leadership sequentially mediate the relationship between gender and leadership role occupancy. Finally, Korek et al. analyze the role of career motivation as a facilitator of consequences of upward career transitions and report counterintuitive findings.

## Conclusion and Implications for Research/Practice

Different types of motivation and their interplay with gender are an important precursor for careers and leadership. Practically, motivational issues should be addressed in career counseling.

## ***Presentations of the Symposium***

### **Further insights into the meaning of motivation to lead**

Jörg Felfe (Helmut Schmidt Univ. Hamburg) [felfe@hsu-hh.de](mailto:felfe@hsu-hh.de), Magdalena Gatzka (Helmut Schmidt Univ. Hamburg), Gwen Elprana (Helmut Schmidt Univ. Hamburg), Sibylle Stiehl (Helmut Schmidt Univ. Hamburg)

#### Purpose

Germany is facing a shortage of professionals and managers. Meanwhile, female leaders remain underrepresented. Therefore, efforts aimed at building leadership pipelines by identifying high potentials gain more importance. So far, little attention has been given to the explanatory power of motivation. We argue that motivation to lead (MTL) is an essential prerequisite for the assumption of leadership and for leader efficiency. Extending the work of Chan and Drasgow (2001) we addressed the following hypotheses: 1) specific MTL patterns (striving and avoidance) are predictive for the intention to assume a leadership position and for leadership emergence; 2) Romance of leadership (RoL) predicts MTL, particularly for persons high in self-efficacy and personal initiative; 3) MTL is predictive for career success and transformational leadership. Moreover, gender differences were tested.

#### Design/Methodology

A series of cross-sectional and longitudinal studies with an overall  $N > 1500$  was conducted.

## Results

Results confirm that specific motive patterns are predictive for the intention to assume a leadership position, leadership emergence, and transformational leadership. RoL predicted MTL, particularly when self-efficacy and personal initiative were high.

#### Limitations

Causality of the results remains to be tested.

#### Research/Practical Implications

A deeper understanding of the influence of motives and their interactions on behavior provides a profound basis for individual career counseling and training. Women's higher avoidance motivation may present a starting point for furthering women's participation in management positions.

#### Originality/Value

This study is the first to systematically analyze the interplay of different components of MTL and its meaning for leadership behavior.

### **Affective, non-calculative and social motivation to lead: What we know from studies of entrepreneurial, professional and leadership motivation**

Kim Y. Chan (Nanyang Technological Univ., SG) [akychan@ntu.edu.sg](mailto:akychan@ntu.edu.sg), Yi Meng Li (Nanyang Technological Univ., SG), Moon-Ho Ho (Nanyang Technological Univ., SG), Olexander Chernyshenko (Nanyang Technological Univ., SG), Yoke Loo Sam (Nanyang Technological Univ., SG)

#### Purpose

In 2001, Chan & Drasgow developed a 3-factor model and self-report measure of the motivation to lead (MTL) including affective, social-normative and non-calculative factors. Recently, Chan et al. (2012) adapted this 3-factor model for the measurement of entrepreneurial and professional motivations as part of a new measure of entrepreneurial, professional and leadership (EPL) career aspirations. We explore the meanings of the three MTL factors



empirically in relation to EPL career intentions, the Big Five personality factors, individualism-collectivism values, and EPL efficacy.

#### Design/Methodology

Using a data from a university-wide survey of 10,326 students, we examine relationships between affective, social-normative and calculative/non-calculative EPL motivation factors with EPL career intentions. We employ structural equation modeling with separate survey data from 620 undergraduate students to examine the relationship between personality, values and efficacy with each of the three factors of EPL motivation.

#### Results

All three factors of EPL motivation are found to correlate with the respective, EPL career intentions. Interestingly, all three entrepreneurial motivation factors correlate positively with leadership career intentions but negatively with professional career intentions. Like Chan and Drasgow (2001), we also observe different patterns of relationships between the Big Five personality factors, individualism-collectivism values, and EPL efficacy measures with each of the three factors of EPL motivation.

#### Limitations

Observations are based on cross-sectional, self-report survey data collected from university students in Singapore.

#### Research/Practical Implications

Findings are discussed in relation to the meaning and measurement of MTL.

### **Personality and the intention to lead: Motivation to lead as underlying mechanism**

*Sibylle Stiehl (Helmut Schmidt Univ. Hamburg) [stiehl@hsu-hh.de](mailto:stiehl@hsu-hh.de), Magdalena Gatzka (Helmut Schmidt Univ. Hamburg), Gwen Elprana (Helmut Schmidt Univ. Hamburg), Jörg Felfe (Helmut Schmidt Univ. Hamburg)*

#### Purpose

The five-factor model of personality revived interest in the trait theory of leadership (Colbert, Judge, Choi, & Wang, 2012; Judge, Bono, Ilies, & Gerhardt, 2002). Accordingly traits have been categorized into five main factors: extraversion, neuroticism, conscientiousness, agreeableness, and openness to experience. Moderate correlations have been found regarding diverse organizational outcome criteria. So far little is known about the mechanisms which explain why personality influences leadership emergence (Colbert et al., 2012). The present study identifies motivation to lead (MTL) (Felfe, Elprana, Gatzka, & Stiehl, 2012) as mediating process linking extraversion, neuroticism, and conscientiousness to the intention to lead.

#### Design/Methodology

MTL was conceptualized as four dimensional construct including affective, normative, and calculative MTL, as well as avoidance of leadership (following Chan & Drasgow, 2001). To examine the role of MTL we examined 659 students from various universities in Germany.

#### Results

Multiple mediation analyses (Hayes, 2012) support our hypotheses. We observe a full mediation for extraversion and neuroticism and a partial mediation for conscientiousness.

#### Limitations

Findings are limited to university students from Germany. Since the data relies on self-report the possibility of common method bias will be discussed.

#### Research/Practical Implications

These results imply that facets of MTL explain the relation between personality traits and the intention to lead. Beyond the five main personality factors specific motivation plays a crucial role in explaining why people emerge as leaders.

## Originality/Value

The present study advances the understanding on why certain leaders take on leadership positions.

**Gender and the motivation to lead: What we know from studies of entrepreneurial, professional and leadership in the 21st century.**

*Yi Meng Li (Nanyang Technological Univ., SG) [liyimeng@pmail.ntu.edu.sg](mailto:liyimeng@pmail.ntu.edu.sg), Kim Yin Chan (Nanyang Technological Univ., SG), Olexander Chernyshenko (Nanyang Technological Univ., SG), Moon-Ho Ho (Nanyang Technological Univ., SG), Kin Yew Low (Nanyang Technological Univ., SG), Jian Ma (Central South Univ., CN)*

## Purpose

Gatzka, Elprana, Stiehl, & Felfe (2009) noted that past attempts to explain the underrepresentation of women in leadership positions worldwide had neglected the motivational aspects of leadership. In their structured interviews with 50 organizational leaders, male managers rated the motivation to lead (MTL) as significantly more essential in attaining leadership positions than females. No gender differences were found in self-rated MTL. Our present study examines gender differences in MTL as measured psychometrically using the entrepreneurial, professional and leadership (EPL) motivation scales developed by Chan et al. (2012).

## Design/Methodology

We examine gender differences in MTL as measured a university-wide EPL career aspiration survey of 10,326 students. Using an in-depth, follow-study of 272 students from this sample, and another sample of 521 business school students, we examine the extent to which gender differences in MTL may be explained by differences in personality, values and efficacy.

## Results

We observe consistently significant, lower MTL for the females than males and that this difference is accounted for by self-reported leadership efficacy. This pattern of findings is also observed with entrepreneurial but not with professional motivation.

## Limitations

Our findings are limited to university students in Singapore.

## Research/Practical Implications

Implications of these findings for the study of gender and leadership are discussed.

## Originality/Value

Our paper enhances the understanding of gender differences & leadership within broader framework of EPL career aspirations & motivation in the 21st century.

**Gender and leadership role occupancy: The role of power motivation and transformational leadership**

*Alina S. Hernandez Bark (Goethe Univ. Frankfurt, DE) [HernandezBark@psych.uni-frankfurt.de](mailto:HernandezBark@psych.uni-frankfurt.de), Jordi Escartín (Univ. of Barcelona, ES), Sebastian C. Schuh (Goethe Univ. Frankfurt, DE), Niels Van Quaquebeke (Kühne Logistics Univ., Hamburg, DE), Rolf van Dick (Goethe Univ. Frankfurt, DE)*

## Purpose

Why are men overrepresented in leadership positions? First, we assume a relation between power motivation and leadership role occupancy. Second, because power aspirations are more congruent to the male gender role, men should possess stronger power motivation than women. On the other hand, we assume women to show more transformational leadership than men and a positive link between transformational leadership and leadership role occupancy. Further, we assume power motivation and transformational leadership working as (serial) mediators in the gender- leadership-role-occupancy relation.

**Design/Methodology**

We tested our assumptions in two cross-sectional surveys with samples of employees from different industries (Study 1:  $N=633$ ; Study 2:  $N=256$ ).

**Results**

Logistic and hierarchical regression analysis confirmed (1) men to have stronger power motivation than women, and (2) power motivation mediated the gender- leadership-role-occupancy relation. The second study extends our findings by showing that power motivation and transformational leadership are positively related, and that power motivation and transformational leadership mediate in a serial way the gender- leadership-role-occupancy relation. The results reveal that although men are less transformational than women, they profit from their strong power motivation.

**Limitations**

Our model should be tested also in a longitudinal design and including other variables of interest (e.g. prototypicality).

**Research/Practical Implications**

These findings contribute to the research of potential mediators in the gender-leadership-role-occupancy relation and highlight new possibilities for gender equality interventions.

**Originality/Value**

Our innovative serial mediation model leads to relevant practical implications and further questions in the context of gender equality in management.

**Positive and negative consequences of upward career transitions within organizations: The facilitating role of career motivation**

Sabine Korek (Univ. Leipzig) [korek@uni-leipzig.de](mailto:korek@uni-leipzig.de),  
Thomas Rigotti (Univ. Mainz)

**Purpose**

Although careers are getting more "boundary-less", transitions within employees' current organization are still meaningful. We expect higher career satisfaction after a career transition. Simultaneously, we expect higher psychological strain as a negative consequence due to growing demands. We especially focus on the role of career motivation, hypothesizing that high levels of motivation will booster the link between transition and career satisfaction and buffer the link to psychological strain.

**Design/Methodology**

We tested our assumptions in two cross-sectional surveys with samples of employees from different industries (Study 1:  $N=633$ ; Study 2:  $N=256$ ).

**Results**

Logistic and hierarchical regression analysis confirmed (1) men to have stronger power motivation than women, and (2) power motivation mediated the gender- leadership-role-occupancy relation. The second study extends our findings by showing that power motivation and transformational leadership are positively related, and that power motivation and transformational leadership mediate in a serial way the gender- leadership-role-occupancy relation. The results reveal that although men are less transformational than women, they profit from their strong power motivation.

**Limitations**

Our model should be tested also in a longitudinal design and including other variables of interest (e.g. prototypicality).

**Research/Practical Implications**

These findings contribute to the research of potential mediators in the gender-leadership-role-occupancy relation and highlight new possibilities for gender equality interventions.

**Originality/Value**

Our innovative serial mediation model leads to relevant practical implications and further questions in the context of gender equality in management.

**Position Papers**

### **Leadership Culture and Climate – Enhancing or Destroying Leadership Excellence within the Leadership Community?**

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Towards a typology of different leadership cultures and climates infusing leadership communities with their consequential effect on leadership excellence

**State of the Art**

In recent years the organisational context has moved from being relatively stable, simple, orderly, predictable and localised to one of discontinuous, radical change, heightened complexity, snow balling chaos, deepening ambiguity, and boundarilessness. These contextual shifts have resulted in the commensurate movement in organisations from THE leader – the sole individual leader at the top of the organisation - to shared leadership – simultaneous leadership at all organisational levels - to effectively deal with this more demanding context. Shared leadership implies viewing the collectivity of leaders in an organisation from a community of practice perspective. Adopting this perspective invokes the need to understand the nature and dynamics of leadership culture and climate within the leadership community of an organisation with its consequential effect on leadership excellence.

**New Perspective/Contribution**

The purpose of this conceptual paper is to propose a typology of different leadership

cultures and climates – shared patterns of seeing, interpreting and acting – which can infuse leadership communities with their consequential impact on leadership excellence in an organisation. To this end, firstly, leadership as future-reference, acts of influencing, embedded within a specific organisational setting, is addressed; secondly, the crucial contribution of leadership culture and climate in constituting and sustaining the leadership setting, is explicated; thirdly, a critical, reinforcing triangle of leadership landscape dynamics (of which leadership culture and climate form an important part) is proposed, enabling/ disabling leadership excellence within an organisation; fourthly, the building blocks of leadership culture and climate are distinguished; and, finally, a typology of different leadership culture and climate patterns is suggested which can infuse a leadership community, and consequently the organisational setting, resulting in different conceptions of leadership excellence within such a community.

**Conclusion and Implications for Research/Practice**

Leadership does make a difference. If future leadership takes on the nature of distributed leadership, the study of leadership communities increasingly become important. Critical to such communities is the leadership culture and climate infusing these communities. The proposed typology of leadership cultures and climates opens up the opportunity to study empirically in a comparative manner different leadership cultures and climates with their consequential impact on leadership excellence, and ultimately organizational performance and success.

## Motivational Bases of Distributed Leadership in Organization

Ajay Kumar Jain (Aarhus Univ., DK) [ajay@psy.au.dk](mailto:ajay@psy.au.dk), Hans Jeppe Jeppensen (Aarhus Univ., DK), Robert Thompson (Queensland Univ. of Technology, AU)

Researchers have widely studied the issues related to the concept of leadership and motivation in the field of organizational psychology. However, only limited research is conducted to explore the significance of motivational theories to understand employees' motivation for participation in leadership task as shared or distributive leadership. This research is aiming at investigating how theories of motivation can contribute to explain employees' involvement in Distributed Leadership (DL) practices. The paper is based on a review of literature from the field of motivation and DL as part of an ongoing longitudinal research project.

The literature is examined in order to identify the sources of individual motivation for participation in the leadership functions. More specifically, it is discussed what can motivate employees to participate in leadership activities? Based on the empirical and theoretical evidence, the relevance of motivational theories is analyzed for both employee participation and DL practices in organization.

Overall the analyses find support for some relevance of major motivational approaches; however, self-determination and equity theories provide a more promising explanation for employees' participation in DL practices. It is argued that intrinsic motivation, as it integrates the understanding of human development processes, is required for the single employee to go beyond his/her routine activities in order to influence and participate in the organizational decision making process. Furthermore, equity theory, with its focus on fairness and justice in organizations, may help in developing a broader organizational context

to promote employees' involvement in DL practices in the organization. In this way, DL practices could be institutionalized to improve the organizational effectiveness.

## The effects of transformational leadership behaviours on follower outcomes: An identity-based analysis

### ***Center for Creative Leadership Award for the Best Leadership Paper Published in EJWOP - Award Winner 2011***

Elizabeth V Hobman (Univ. of Queensland, AU) [liz.hobman@csiro.au](mailto:liz.hobman@csiro.au), Chris J. Jackson (Univ. of New South Wales, AU), Nerina L. Jimmieson (Univ. of Queensland, AU), Robin Martin (Aston Univ., Birmingham, UK)

The aim of this study was to explore two of the mechanisms by which transformational leaders have a positive influence on followers. It examined the mediating role of follower's leader and group identification on the associations among different transformational leader behaviours and follower job satisfaction and supervisor-rated job performance. One hundred and seventy-nine healthcare employees and 44 supervisors participated in the study. The results from multilevel structural equation modelling provided results that partially supported the predicted model. Identification with the leader significantly mediated the positive associations between supportive leadership, intellectual stimulation, personal recognition, in the prediction of job satisfaction and job performance. Leader identification also mediated the relationship between supportive leadership, intellectual stimulation, personal recognition, and group identification. However, group identification did not mediate the associations between vision leadership and inspirational communication, in the prediction of job satisfaction and job performance.

The results highlight the role of individualized forms of leadership and leader identification in enhancing follower outcomes.

### **Transformational leadership and customer service: A moderated mediation model of negative affectivity and emotion regulation**

***Center for Creative Leadership Award for the Best Leadership Paper Published in EJWOP - Award Winner 2011***

*Aichia Chuang (National Taiwan Univ., CN) [achuang@ntu.edu.tw](mailto:achuang@ntu.edu.tw), Timothy Judge (Univ. of Notre Dame, US), Yuann Jun Liaw (National Science Council, TW)*

Integrating theories from leadership, emotion management, affectivity, and customer service, this study examines how transformational leadership leads to favourable customer intentions via the mediation of service employees' emotion regulation, job satisfaction, and their service performance and via the moderation of employee negative affectivity. Results obtained from data of 204 matched sets of managers, service employees, and customers show that the effect of transformational leadership on amplification of pleasant emotions was conditioned on service employees' negative affectivity. Employee service performance partially mediated the effect of job satisfaction on customer outcomes. Finally, overall results reveal that transformational leadership and amplification of pleasant emotions were more strongly related to the customer outcomes, as mediated through the intervening variables in the model, when negative affectivity was high than when negative affectivity was low. Results have implications for how service workers with negative affectivity can manage their emotions to achieve effective service outcomes through interactions with a leader, how the effect of transformational leadership can be bounded, and

how transformational leadership and emotion regulation are relevant to customer service.

### **Single Papers**

### **Management-labor relations' impact on well-being and sickness absence**

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#### **Purpose**

Research shows that positive management-labor relations have a positive impact on psychosocial working conditions at workplaces. Mediated by the working conditions, management-labor relations have a positive impact on employee well-being and sickness absence. However, do positive management-labor relations have an unmediated impact on employee well-being and sickness absence? Management-labor relations can be measured as the degree of trust and respect between management and employees (vertical social capital). The paper tests the hypotheses that vertical social capital has a direct positive relation to well-being and sickness absence, controlling for other dimensions of the psychosocial working conditions (demands, control, and social relations). The relation between social capital and transactional leadership is also tested.

#### **Design/Methodology**

We examined this hypothesis among 1745 unskilled and skilled preschool teachers in 94 public day care centers from the municipality of Copenhagen. Data was collected using a questionnaire on psychosocial working conditions based on items from the Copenhagen Psychosocial Questionnaire (COPSOQ). Sickness absence data was provided by the municipality.



## Results

Multilevel analyses with SAS supported both hypotheses. In addition, vertical social capital and transactional leadership was tightly related at organizational level.

## Limitations

It remains to be tested how much of the results generalize to other sectors and to other national contexts.

## Research/Practical Implications

These results indicate that management and employee representatives should focus on improving vertical social capital to improve well-being and to reduce sickness absence. Transactional leadership style may be one approach to achieve this.

## Originality/Value

The study provides unique large sample of comparable workplace units with similar framing conditions with independent measures of sickness absence.

**Multilevel intragroup analysis of social network models in hospitals: Leadership influence on individual, group, and organizational efficiency in the Spanish national health system**

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## Purpose

Health organizations, especially hospitals, present an organizational structure of workgroups in which intragroup relations are key to the correct functioning of the group, the fulfillment of objectives, and the ability to provide efficient and high quality assistance. That said, the scientific knowledge of the social networks present in these health sector groups is scarce. The aim of this research paper is to find predictive patterns that explain how certain social network models in the

Spanish National Health System workgroups contribute to the human resources efficiency on individual, group and organizational levels, with a focus on leadership influence.

## Design/Methodology

The research employs multilevel and longitudinal analysis methodology with a sample representative of the Spanish National Health System hospitals obtained from 315 workgroups. The information on these intergroup relations was gathered from social network analyses and the efficiency measures were obtained from a variety of questionnaires (leadership, power, diversity, centrality, satisfaction, innovation, performance) completed by various sample sources at different levels.

## Results

The results show how leadership in workgroups has a large influence on the structure of the social network, in intragroup relations, and in satisfaction, innovation, and performance variables both on individual, group and organizational levels.

## Practical Implications/Originality/Value

The practical implications of this research allow the improvement of the clinical practice of healthcare workgroups, thereby improving their efficiency.

**Leader and member's interactional experiences and exchange relationship**

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## Purpose

LMX research has been criticized as lack of attention on the exchange process. This paper fills in this gap by examining the relationship between interaction quality and LMX relationship. "Short-term" versus "long-term" out-

comes of the “interaction-LMX” relationship were also examined.

#### Methodology

We used event-contingent ESM. We installed electronic questionnaires to participant’s cell phones and required them to respond immediately after interactions. Therefore, we examined interaction experiences in naturalistic settings and reduced retrospective reconstruction biases. Multilevel Structured Equation Modelling was used for analysis.

#### Results

We found leaders and members with high LMX were more likely to have positive interaction experiences, which in turn, enhanced LMX in the future. We also found interaction experiences mediated LMX and short-term outcomes such as affectivity and momentary job satisfaction. In comparison, LMX mediated interaction experiences and long-term outcome such as member’s job performance.

#### Implications

Leaders should differentiate the mechanisms of how short-term and long-term goals can be achieved. If leader wants to temporarily increase a member’s performance, he/she should take initiative to interact with the member. If leader wants to increase member’s performance in the long run, he/she should develop a close relationship.

#### Value

This paper focused particularly on leader and member’s interaction experiences which have been understudied. The paper also took initial step to clarify the relationship between episodic exchanges and LMX and found a mutual influencing process between them. Finally, the mediational structure identified pathways through which short-term and long-term goals can be achieved, which has not been documented in the literature.

### **Can you give what you don’t have? Relations between leadership style and leaders’ psychological health and possible mediators**

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#### Purpose

The correlation between leadership style and psychological well-being gains more and more attention. In this context it is an important question how certain leadership behaviors relate to the psychological wellbeing of leaders. The present study tries to answer this question. Meaning of work and team climate were analysed as mediating variables.

#### Design/Methodology

Authentic and transformational leadership style of 250 leaders from Germany, Sweden and Finland were assessed by their followers. Additionally, leaders assessed their own leadership style as well as their psychological well-being.

#### Results

Hierarchical regression analyses displayed significant relationships between authentic as well as transformational leadership style and indicators of psychological well-being. E.g. there was a positive relation between follower-assessed authentic and transformational leadership and work engagement as well as general health. Team climate and perceived meaning of work were confirmed as partial mediators in these relations.

#### Limitations

Results are yet limited to cross-sectional survey data, but longitudinal data are assessed meanwhile.

#### Research/Practical Implications

Further research should investigate different leadership behaviors which may relate to leaders’ psychological wellbeing. It is of further interest, how leaders’ psychological

health influences the leader-follower relationship and followers' health. Based on the present results, suggestions for interventions will be discussed which aim at fostering leaders' psychological health.

#### Originality/Value

Considering leaders' psychological health rather than followers' psychological health is a new and important approach. The study marks first steps in identifying behaviors that are related to leaders' psychological health and especially in finding mediating processes.

### Exploring the link between the perceived leadership style and work-life balance

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#### Purpose

Work-life balance initiatives are often not enough to establish equilibrium between work and non-work spheres. The need to determine the leadership style more likely to support their subordinates on work-life balance matters has been evidenced. This paper aims to explore the relationship between the perceived leadership style (Bass, 1990) and the perception of followers about their work-home interaction (Geurts et al., 2005).

#### Design/Method/Approach

A survey that included the Multifactor Leadership Questionnaire (MLQ) – 5X, the Human System Audit – Transformational Leadership Short Scale (HSA-TFL), and the Survey Work-Home Interaction Nijmegen for Spanish Speaking Countries (SWING-SSC) was completed by 251 employees working in different

companies in Mexico. Pearson correlation and hierarchical multiple regression analyses were run to explore the nature of the relationships.

#### Results

Results suggested significant relations between both constructs. Transformational leadership is likely to be more effective in increasing positive work-home interaction or decreasing negative work-home interaction, only when combined with transactional leadership.

#### Limitations

Main limitations are sample size and cross-sectional research design. Future research should use an increased sample, including different countries, sources and indicators.

#### Research/Practical implications

Results give information on which leadership style is likely to support subordinates on work-life balance. This can be used to develop leadership strategies and implement policies to balance professional and personal life.

#### Originality/Value

This study has tested the direct relationship between leadership and work-home interaction confirming the advantages, as others authors have concluded, of transformational leadership when combined with transactional leadership.

### Receiving work from your boss - Does leader gender matter in organizational delegation?

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#### Purpose

Delegating tasks and responsibilities is a central task of leaders and the core of leader-follower interactions. Although previous studies have looked at antecedents and outcomes of leader delegation with regard to perfor-

mance and satisfaction of employees, we know little about the role of gender and group diversity for delegation outcomes.

#### Design/Methodology

We used an experimental design with questionnaire-based vignettes. In two studies, we varied gender of leader (male-female), amount of delegation (high-low), and follower group composition (all female, all male, mixed) (only study 2). We assessed follower satisfaction, perceived group performance, and overall evaluation of the leader with regard to competence and warmth.

#### Results

Results of study 1 (N=196) showed that leaders were evaluated more positively regarding all dependent measures when they showed a high amount of delegation. This main effect was qualified by a three way interaction. In study 2 (N=295) we partly replicated these findings and showed that group composition did not affect the results.

#### Limitations

To overcome the two main caveats of the study (student sample and lack of direct behavioral measures) field research should look at the effects in a more applied setting.

#### Research/Practical Implications

The current study contributes to our understanding of leadership processes and the challenges females face in organizations. Theoretically, it combines research on delegation with research on gender stereotypes and the role congruity theory.

#### Originality/Value

The study helps to better understand leader-follower interactions and adds to the existing literature by showing that the positive effects of delegating responsibilities to followers are affected by leader and follower gender.

### **The impact of personality - A long-term study on the relationship between personality and managerial success**

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Despite some controversy the use of personality in the prediction of managerial success is widely accepted. However, research concerning the relationship between personality and managerial outcomes has been largely conducted within cross-sectional studies. In order to address this limitation the present study examines the long-term validity of the Big Five personality traits (Openness, Conscientiousness, Extraversion, Agreeableness, Emotional Stability) in a management setting. More detailed, it was investigated to which extent the predictive validity of personality traits is influenced by the time span between predictor and criteria measurement. Therefore, 140 managers (92 male) provided personality data on the Big Five in a first wave. Ten months later (t2) managerial success was measured by income, promotion rate, supervisor ratings on context and task performance, as well as self-ratings of job satisfaction. Another twelve months later (t3) all criteria of success were assessed for a second time. Results displayed that extraversion, conscientiousness, and emotional stability are valid predictors of all criteria at wave two (t2) and three (t3). In fact, the predictive validity of extraversion and emotional stability increased with a longer time span between predictor and criteria measurement whereas the predictive validity of conscientiousness remained stable over time. In contrast, the traits openness and agreeableness were only significantly related to selected criteria assessed at t2 but did not display significant relationships with any criteria measured at t3. The present study supports the validity and utility of personality traits for future managerial success. Moreo-

ver, it demonstrates that the importance of certain traits increases over time.

### **Hierarchy enhancing or hierarchy attenuating: Do men and women differ in their preferences for leadership roles?**

#### ***Nominee of the EAWOP Congress 2013 Best Paper Award***

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#### **Purpose**

The present research investigated gender differences in leadership aspirations and leadership role preferences. Building on the role congruity (Eagly & Karau, 2002) and goal congruity perspective (Diekmann et al., 2011), we examined whether greater importance assigned to communal life goals by women than men underlies women's more than men's preference for hierarchy-attenuating than -enhancing leadership roles (Pratto et al., 1997).

#### **Design/Methodology**

Study 1 (N = 234) and study 2 (N = 282) tested the mediating role of life goals in the relationship between sex and leadership role preferences. Study 3 (N = 102) examined participants' perceived goal affordance for hierarchy-attenuating and -enhancing leadership roles. Study 4 (N = 221) examined the effect of activating communal or agentic goals on participants' leadership role preference.

#### **Results**

The results of studies 1 and 2 showed that men and women did not differ in their leadership aspirations. However women more than men, preferred hierarchy-attenuating leadership roles and men more than women preferred hierarchy-enhancing roles, with communal goals mediating this relationship. Study 3 showed that hierarchy-attenuating leadership roles were perceived as affording com-

munal goals more than hierarchy-enhancing leadership roles. Study 4 showed that participants in the communal goal condition, more than participants in the control condition, preferred hierarchy-attenuating leadership roles.

#### **Research/Practical Implications**

The results suggest that women are more likely to choose a leadership role which affords their communal life goals. Practical implications for encouraging women to lead will be discussed.

#### **Originality/Value**

To our knowledge, the research is the first to apply the goal congruity perspective to the field of leadership and to examine both hierarchy-enhancing and hierarchy-attenuating leadership roles.

### **Men and women as negotiators: A meta-analysis on gender differences in economic and socioemotional negotiation outcomes**

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#### **Purpose**

According to pervasive gender roles, women are presumed to behave accommodately and communally—behaviors that are also ascribed to ineffective negotiators. Building on role congruity theory (Eagly & Karau, 2002), we investigated when women as compared to men are less effective negotiators by conducting a meta-analysis on gender differences in economic and socioemotional outcomes (i.e., negotiators' feelings about the relationship and outcome satisfaction). Importantly, we investigated moderators of gender differences in economic outcomes.



**Design/Methodology**

Multilevel meta-analyses including 44 studies with 127 effect sizes and 10154 participants were performed.

**Results**

Women as compared to men achieved worse economic outcomes, Hedges'  $g = 0.23$ . However, this gender difference was reduced when negotiators had negotiation experience, when participation in negotiation exercises was self-initiated, and when negotiators acted on behalf of other individuals. Gender differences in economic outcomes thus strongly depend on the context. Concerning socioemotional outcomes, women were less satisfied with economic outcomes but did not procure more favorable feelings about the relationship.

**Limitations**

It is unknown whether the cultural background and the gender composition of dyads also moderate the gender difference because few primary studies examine these moderators.

**Research/Practical Implications**

As organisational resources such as salaries or promotion are negotiated, gender differences in negotiation contribute to gender inequalities in the workplace. The observed moderators—e.g., negotiation experience—suggest that practical interventions such as negotiation training might reduce gender inequalities.

**Originality/Value**

This study is the first meta-analysis that shows moderation of gender differences in economic outcomes. Moreover, for the first time, socioemotional outcomes are considered.

## **Respect bridges differences: How leader respect moderates relational demography effects in different gender dyads**

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**Purpose**

Extending the literature on relational demography, our study shows that negative effects of demographic differences in leader-follower dyads, in particular the differences that conflict with traditional role patterns, can be attenuated by respectful leader behavior.

**Design/Methodology**

We conducted a multi-source study in which 212 employee - leader dyads responded to online or paper surveys.

**Results**

The results confirmed our hypothesis that respectful leadership positively influences follower performance in leader-follower dyads with dissimilar gender, especially in cases with a non-traditional role division – where the leader is female and the follower is male. In leader-follower dyads with similar gender this effect was absent.

**Limitations**

Although sufficient for our analysis, the number of dyads consisting of a female leader and a male employee is relatively low. Furthermore, our study focuses on a single demographic trait instead of on a demographic profile.

**Research/Practical Implications**

Our research illustrates that the negative effects of relational demography can be reduced through respectful leadership. In addition our study emphasizes the potential of respectful leadership to restore feelings of belongingness



to the organization when these are lost. These are important insights for any organization with a diverse workforce.

#### Originality/Value

Our multi-source study is among the first to show that the negative effects of relational demography can be reduced, specifically, through respectful leadership. In addition, our research is among the first to present positive leadership, and in particular respectful leadership, as a means to reduce negative effects of the organizational environment by restoring follower belongingness.

### **Abusive supervision in a time of crisis: Implications for emotions and performance**

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#### Purpose

We still know little concerning the impact of the contextual factors under which abusive supervision (AS) tends to occur (Restubog et al., 2011). Given the current global economic scenario, we propose to examine the role of individuals' experience of collective angst (i.e., the country's future is in jeopardy: Wohl et al., 2010) on the relationship between AS and performance via emotional responses.

#### Design/Methodology

Our study involved 378 employee-supervisor dyads from 61 organizations. AS, emotions and collective angst were collected from employees, while ratings of in-role performance and OCBs were collected from supervisors.

#### Results

Our results supported our hypotheses. AS was positively related to negative emotions and negatively related to positive emotions, and these relationships were moderated by collective angst, such that they were stronger when collective angst was low. Moreover, these interaction effects carried over to both in-role

performance and OCB via positive emotions. Negative emotions were not related to both types of performance.

#### Limitations

One limitation of this study is its cross sectional nature, which does not allow for causality inferences, and therefore our proposed framework should be interpreted with caution.

#### Research/Practical Implications

Our results have both theoretical and practical implications. First, it provides evidence that the way in which individuals experience the current economic scenario affects the process steaming out of AS. Second, it shows managers should worry not only about AS but also about how their employees are interpreting external events, namely the current crisis.

#### Originality/Value

It is the first study that we know of to examine AS within the context of the current economic crisis.

### **Transformational leadership and follower's unethical behavior for the benefit of the company: A two-study investigation**

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#### Purpose

To more thoroughly investigate the ethical dimension of transformational leadership (TL), we examined the relations between TL and unethical yet pro-organizational follower behavior (UPB). Moreover, we addressed mediating and moderating processes.

#### Design/Methodology

We conducted 2 separate field studies ( $N_1 = 290$ ,  $N_2 = 319$ ) with 3 measurement points each, capturing TL at time 1, follower's organizational identification as well as their disposition towards unethical behavior (amoral

and fairness, respectively) at time 2, and follower's willingness to engage in UPB at time 3. We conducted CFAs to demonstrate construct distinctiveness.

#### Results

In both studies, we found a positive relationship between TL and employees' willingness to engage in UPB. Furthermore, both studies showed organizational identification to function as a mediating mechanism and employees' amorality (fairness) to amplify the relationship between organizational identification and willingness.

#### Limitations

We measured participant's willingness to engage in UPB, not actual UPB. Furthermore, social desirability may be an issue.

#### Research/Practical Implications

One practical implication is that TL should be accompanied by an explicit ethical mission. This should be taken into account by HRD professionals when setting up training initiatives that focus on transformational leadership behavior.

#### Originality/Value

Focusing on followers' unethical but pro-organizational behavior as an outcome of TL marks a unique and important contribution because the UPB concept allows for disentangling pro-organizational and ethical aspects of follower behavior. These aspects are intertwined when using other, more established concepts of employee behavior that are ethically relevant (workplace deviance or citizenship behavior). Disentangling these aspects allows for a more thorough investigation of TL's ethicality.

### **Nepotism in leadership context: How followers react toward relatives as leaders?**

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#### Purpose

To date, empirical research on how nepotism directly affects the followers' perception of the nepotized leader is scarce. This research tackles the questions of: does nepotism positively or negatively affect the followers' trust toward and identification with the leader; is tolerance for nepotism a moderating process that influences the relationship between nepotistic practices and leadership outcomes (trust, identification with leader).

#### Design/Methodology

In a 2 (familial relationship: with vs. without) X 2 (target qualifications: well-qualified vs. under-qualified) between-subject design, 121 American students read the target's job application and evaluated their trust toward the leader and their identification with the leader. Two weeks later, their tolerance for nepotism was assessed.

#### Results

No interaction effect was found. Whatever the competence of the leader, participants had a lower trust toward a relative as a leader than a non-relative. They identified less with a relative as a leader than a non-relative. However, controlling for tolerance for nepotism, the results became non-significant. These results suggested that the fact that leaders are relatives of executives disqualified them in the eyes of their followers, at least when followers have a low tolerance for nepotism.

#### Limitations

Although students had to have work experience to participate, this study has to be replicated within a worker sample.

**Research/Practical Implications**

Understanding the mechanism and consequences of nepotism is a prerequisite for the comprehension of how organizations can and should work to prevent nepotism in leader selection/succession.

**Originality/Value**

This research uses a currently validating scale of tolerance of nepotism.

### **“Neutralizing” bad leadership: An investigation of moderators of laissez-faire leadership’s effects on teams**

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**Purpose**

Laissez-faire leadership has been shown to unfavorably affect individuals and teams (Judge & Piccolo, 2004). Drawing on Jerr and Kermier’s (1978) substitutes and neutralizers of leadership theory as well as the subsequently proposed classification of moderators (Howell, Dorfman, & Kerr, 1986), we examine contextual moderators that might attenuate or even neutralize the unfavorable influence of laissez-faire leadership on group functioning. Whereas Avolio, Howell, and Sosik (1999) identified a laissez-faire leader’s use of humor as a powerful mechanism to attenuate negative outcomes, we focus on a team’s demographic composition as a contextual condition that neutralizes these leaders’ detrimental effects on groups.

**Design/Methodology**

We tested our assumption based on a sample of 617 individuals clustered in 72 teams in Germany. Team members rated their supervisors’ laissez-faire leadership. Supervisors rated several indicators of team functioning and performance in a time-lagged manner.

**Results**

Using hierarchical regression analyses, we found support for our assumption.

**Limitations**

Future research should investigate the assumed relations of laissez-faire leadership, moderators, and outcomes while controlling for transformational and transactional leadership (Judge & Piccolo, 2004).

**Research/Practical Implications**

This study contributes to the knowledge on the context-dependency of a leader behavior’s effectiveness. Understanding under which conditions laissez-faire leadership’s detrimental effects can be neutralized can help organizations appropriately match supervisors and teams.

**Originality/Value**

To our knowledge, this study is the first to investigate laissez-faire leadership in its three-way interactive relation with a team’s demographics (i.e., mean and dispersion). Our reasoning on the context-dependency of laissez-faire leadership’s effects is systematically embedded in Kerr and Jermier’s (1978) theoretical framework.

### **Native and immigrant followers: The role and impact of transformational leadership on health and well-being**

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**Purpose**

Globalization and diversity at work call for an enhanced understanding of nationality and culture in leadership. By investigating intra-national differences between native Danish and immigrant followers, we seek consensus between the universalistic (etic) and cultural (emic) approaches to the perception and effects of transformational leadership.

**Design/Methodology**

Longitudinal data stem from the second (2006) and third (2008) wave of a large cohort study in the Danish elderly care sector. Response rates were 64% in second and 63% in third wave. Our sample includes followers from both waves, thus consisting of 2,947 respondents (2,836 natives and 111 immigrants).

**Results**

T-tests show no difference in mean level transformational leadership for the two groups. GLM analyses show a strong, significant relationship between transformational leadership and well-being for immigrants and a weaker but significant relationship for natives. We also find a significant relationship between transformational leadership and health for natives and a weaker, non-significant relationship for immigrants.

**Limitations**

Sample size of the immigrant group did not allow us to subdivide the group in clusters of origin.

**Research/Practical Implications**

Transformational leadership is a potential, universal agent for developing well-being among both native Danish and immigrant followers. The different relationships between transformational leadership and health in the two groups suggest a non-universality of the effects of transformational leadership on health.

**Originality/Value**

To our knowledge, the study is the first to analyze transformational leadership, its perception and predictive value on health and well-being for native and immigrant followers within a common nation and sector.

**Evaluating leadership development: A tale of two methods**

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**Purpose**

Often, training evaluation focuses on only one level of an intervention without considering the learning-performance system and therefore disregards contextual influences on training effectiveness. The current research explores how to improve this situation by combining two approaches to training evaluation, Kirkpatrick's (1959) largely quantitative four level model, and Brinkerhoff's (2005) qualitative Success Case Method (SCM), to evaluate the Leadership Development Program from the Center for Creative Leadership (CCL).

**Design/Methodology**

Quantitative data from multiple sources, including CCL's pre-post 360 degree instrument (N= 2759), were analysed using descriptive statistics and then combined with qualitative data from interviews with Participants (N= 14) and Facilitators (N= 8).

**Results**

Building on Kirkpatrick's structured data, Brinkerhoff's method highlighted some valuable aspects of the program not captured in the surveys, as well as potential areas for improvement. Business-relevant examples of leadership improvement are seen in context.

**Limitations**

Limitations pertaining to generalizability arise mainly from the difficulty to access available data, in particular the number of participant interviews was small.

**Research/Practical Implications**

The present study shows that combining these methodologies results in a holistic evaluation which improves diagnostic capability of broader learning-performance system factors.

This combined approach is particularly well suited to sophisticated interventions such as leadership development.

#### Originality/Value

To our knowledge this is the first paper to use Brinkerhoff's SCM in the area of leadership development.

### **Differences in the effectiveness of the leadership development program in Europe and in the United States**

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#### Purpose

Leadership Categorization theory (Lord & Maher, 1991) posits that people have different ideas of what constitutes good leadership, and the GLOBE project (House, Hanges, Dorfman, Javidan & Gupta, 2004) and others have shown that ideas of leadership vary systematically across cultures. This impacts not just leadership practice, but also leadership development. The present research constitutes a cross-cultural examination of the differences in the impact of the CCL's Leadership Development Program (LDP), which is a program based primarily on US-American models and ideas of effective leadership, but delivered to middle-managers in Europe and the US alike.

#### Design/Methodology

Using the Mann-Whitney U-test, we compared the LDP impact between participants of Europe (N=184) and the US (N=1845) programs. The data on behavior change was collected 6 months after completing the LDP and was based on 360-degree assessment and semi-structured interviews with LDP alumni and facilitators.

#### Results

The LDP appears to have similar impact on behavior change in Europe and the US. How-

ever, interviews revealed that the European participants describing facilitators of training transfer mostly referred to the role of others, while participants in the US stressed more the role of personal commitment.

#### Limitations

The big difference in the sample size of two groups led to lower statistical power in analyzing differences.

#### Research/Practical Implications

The study reinforced the findings of previous research on similarity of leadership issues in Europe and the US. However, the results suggest that instructional designers need take cultural differences into account as influences on training transfer.

#### Originality/Value

To our knowledge, this research is the first to study cross-cultural differences in the impact of leadership development initiatives.

### **Group development as instrument for leadership development: Perspectives from a German-Israeli leadership development program**

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#### Purpose

Leadership development programs (LDPs) are often composed of international participant groups with diverse cultural backgrounds. However, the way in which group composition and development intertwine with leadership learning is rarely studied. Building on group development theory (eg Tuckman 1965), this question is examined within a German-Israeli LDP where the interplay between participants' primary task as leaders and binational relations is deliberately crafted into the program.

#### Design/Methodology

The first two cohorts' (n=36) group development was examined longitudinally over the

course of a year. A group questionnaire (Moos, 1994) was administered repeatedly and compared to module evaluation questionnaires, qualitative analysis of group discussion protocols as well as semi-structured follow-up interviews.

#### Results

Balancing multiple interests and dealing with conflict appear as critical issues both in group and individual leadership development. Anger expression in the group increases significantly while cohesion remains high. Key themes in group discussions include individual responsibility within systems, managing cohesion and separation within groups as well as balancing individual and collective identities. However, the interplay between group and leadership development is rarely addressed explicitly by participants.

#### Limitations

Since data was only available for the first cohort at the time of submission, it remains to be seen how results will be replicated in the second cohort.

#### Research/Practical Implications

Results imply that group development can be an effective instrument for leadership development as it mirrors key challenges in leadership. However the explicit reflection of the two levels' interplay appears to be critical for success.

#### Originality/Value

The study provides insight into the interplay of group and leadership development in international LDPs and identifies success and risk factors.

### **Team leaders' position in meeting networks – A social network analysis**

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#### Purpose

Team meetings are key situations in organizations with significant influence on team performance (Kauffeld & Lehmann-Willenbrock, 2012). The role of team leaders is important for the success of meetings. However, previous research on team leaders has neglected the actual meeting interaction. In our paper, we analyzed team leaders' naturally-occurring meeting behavior from a network perspective. We examined their structural position in the interaction network and their influence on functional and dysfunctional aspects of the meeting behavior.

#### Design/Methodology

We analyzed the videotaped interaction in 49 regular team meetings from two German companies.

#### Results

Social network analysis demonstrated that team leaders have a significantly more central position in the interaction networks. Subsequent MANOVAs showed that team leaders facilitate the discussion and assume the role of experts. However, they do not contribute less dysfunctional statements than other team members.

#### Limitations

The generalizability of our results to other non-industrial types of teams remains to be tested.

#### Research/Practical Implications

Our results show that team leaders use their central position in team meetings not only in a positive way to facilitate the discussions but also negatively to contribute criticism and complaints. Thus, team leaders should be made aware of the impact of role conflicts and dysfunctional communication in teams.

#### Originality/Value

To our knowledge, this is the first study to apply social network analysis to team leaders'



actual meeting behavior and explore the naturally-occurring interaction between team leaders and members in team meetings from a structural point of view.

### **Getting followers to transcend their self-interest for the benefit of their company: Testing a core assumption of transformational leadership theory**

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#### **Purpose**

We aimed at testing transformational leadership's capacity to enhance followers' willingness to engage in selfless pro-organizational behavior (SPB), that is, behavior for the benefit of the company that is inapt to be instrumentally used for self-serving purposes and carried out despite salient personal costs. Furthermore, we aimed at demonstrating followers' organizational identification to mediate this relationship.

#### **Design/Methodology**

321 employees from different organizations completed questionnaires measuring transformational leadership (t1), organizational identification, and – to control for dispositional effects – honesty/humility (t2). To capture actual SPB, employees performed a distribution task where trade-off decisions had to be made between pro-self and pro-company alternatives (t3). Furthermore, participants' general willingness to engage in SPB was measured by means of a self-report questionnaire. We conducted CFAs to demonstrate construct distinctiveness.

#### **Results**

We found transformational leadership to predict followers' (willingness to engage in) SPB and organizational identification to fully mediate this relation.

#### **Limitations**

The setting we designed to capture actual SPB comes with certain limitations regarding external validity.

#### **Research/Practical Implications**

Our results confirm that transformational leadership and transformational leadership-induced organizational identification indeed promote genuine pro-organizational behavior carried out despite personal detriments that are not outweighed by personal (e.g., reputational) benefits. With it, this study clearly demonstrates the importance of transformational leadership as well as employees' organizational identification for organizational success.

#### **Originality/Value**

Getting followers to transcend their self-interest is a core element of transformational leadership theory. By sophisticatedly disentangling company interests from employees' self-interests, this study displays a more rigorous attempt to empirically confirm this assumption.

### **Antecedents and consequences of followers' perceptions of authentic leadership**

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#### **Purpose**

The purpose of this multi-level study is 1) to examine what predicts follower perceptions of leaders' authentic leadership (AL), specifically leaders' self-perceptions, characteristics and communication frequency, and 2) its effect on employees' PsyCap and work engagement.

**Design/Methodology**

Forty working teams (190 employee and 40 leaders) from several Spanish retail companies participated in the study. Participants completed a questionnaire measuring their PsyCap and work engagement. Team members rated their leaders' AL. Each leader also rated his or her AL and PsyCap.

**Results**

Multilevel analyses conducted with SPSS indicated that the relationship between self-rated and perceived AL was not significant. Employees' perceptions of AL were predicted by leaders' gender and frequency of contact with the leader. Besides, perceived AL, but not leaders' self-ratings significantly predicted followers' PsyCap and work engagement. Followers' PsyCap mediated the relationship between perceived AL and work engagement.

**Limitations**

The study included a relatively small number of teams and factors to predict followers' perceptions of AL.

**Research/Practical Implications**

These findings suggest that follower perceptions of leaders' AL are more important for predicting follower outcomes than leaders' self-ratings. Followers' perceptions are not related to leaders' perceptions. Thus, leaders need to be made aware of this discrepancy and the way followers perceive them and find ways of improving follower perceptions of their authentic leadership.

**Originality/Value**

To our knowledge, this study is the first to analyze the role of both leaders' and followers' ratings of leaders' AL, predictors of followers' perceptions of leadership, and their effect on followers' work outcomes.

## **In the moral eye of the beholder: The interactive effects of leader and follower moral identity on ethical leadership and leader-member exchange**

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**Purpose**

Whereas previous research has focused either on the effects or antecedents of ethical leadership, we test for its mediating role between leader moral identity and quality of leader-member relationships. Extending previous research, we combine leader and follower perspectives by considering the degree of followers' level of moral identity.

**Design/Methodology**

We conducted a dyadic field study with a sample of 97 leader-follower dyads. Both, leader and followers indicated their moral identity. Further, followers answered questions regarding their ethical leadership perception and quality of leader-member relationship.

**Results**

Results suggest that leader moral identity predicts followers' evaluation of ethical leadership and ultimately the quality of the leader-follower relationship. More importantly, supporting our proposition of a moderated mediation, we find evidence that the link between leader moral identity via ethical leadership to quality of leader-member relationships is stronger for followers with a strong (vs. weak) moral identity.

**Limitations**

The study is cross-sectional and provides, therefore, no causal testing. However, the results are in line with previous research. Further, future research needs to address in how

far the current results impact on actual performance results.

#### Research/Practical Implications

High moral identity of the leader alone cannot create high-quality LMX relationships. The current findings suggest the importance of promoting follower moral identity in addition to leader moral identity. Thus, ethics-oriented training and selection procedures should include followers as well as leaders.

#### Originality/Value

The current study emphasizes the importance of understanding leadership as a relationship involving leaders and followers.

### **Promoting team learning: The power of leadership and positive emotions**

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#### Purpose

This study examines the role of positive emotions as an important psychological mechanism that explains how learning leadership is associated with team learning. Based on the importance of affective states in organizations and the broadening potential of positive emotions for building resources, we hypothesized that positive emotions fully mediate the relationship between learning leadership and team learning.

#### Design/Methodology

For this study, we sampled 517 employees, nested within 127 teams, from 46 companies (79% Service sector) from small and medium organizations in Spain.

#### Results

Structural Equation Modeling analysis at the team level shows that learning leadership is positively related to both positive emotions

and team learning. Moreover, results show that positive emotions partially mediate the relationship between learning leadership and team learning.

#### Limitations

This is a cross-sectional study with self-report data. Team structure was not considered in this study.

#### Research/Practical Implications

These results suggest that learning leadership fosters collective positive emotional atmosphere among teams, which contributes to create a context that infuse team learning. This provides compelling evidence of the influence of leader's behaviors not only towards learning, but also to team emotional state. This suggests the importance of developing both aspects: leader's behaviors that encourage learning, and positive emotional team context, which contributes to team learning process.

#### Originality/Value

This study contributes to the understanding of the powerful role of learning leaders to infuse both positive emotions and team learning. In addition, it contributes to the exploration of the positive emotions as predictive variable of team learning in addition to more structural (i.e., leadership) or cognitive (i.e., psychological safety) indicators.

### **Communication competency of school principals: Conceptual foundation, construction and validation of a standardized measure**

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#### Purpose

Leader-follower communication plays an important role in all organizations. However, research on school leadership did not focus on communication competency (CC) and its impact on school quality (e.g. on teachers' com-

mitment, job satisfaction) so far; there is a striking lack of theory and empirical data. Therefore, this paper describes the development and validation of a standardized measure for CC of school principals. It is based on a theoretical framework with LMX as a communication-based approach to leadership and an interpersonal communication process model.

#### Design/Methodology

CC was conceptualized as a 3-dimensional construct. Five studies were conducted with German teachers and school principals from all types of schools (total N=1649): selection of items via expert ratings, exploring the dimensionality, cross-validation of the structure, test-retest-reliability, external validity.

#### Results

Analyses led to a 3-factor solution—Altercentrism, Knowledge and Willingness to Communicate, Self-Regulation—with 14 items and good internal consistencies. CFA, exploring the nomological network, and invariance measurement supported construct validity.

#### Limitations

Empirical studies still have to be conducted to evaluate the application in other leader–follower contexts apart from school.

#### Research/Practical Implications

The measure and the theoretical framework can be applied for analyzing principal–teacher interactions in detail and for detecting problems in communication processes. The measure can also be used for feedback processes and for demand-oriented trainings.

#### Originality/Value

For the first time, this paper explicitly combines the concepts of CC and leadership in schools and provides a measure within a theoretical framework to assess principals' CC. Such a valid instrument is the prerequisite for further investigating the importance of CC in the context of (school) leadership.

### **Impact of unit leadership and team composition on university accreditation outcomes**

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#### Purpose

This research project consisted of conducting a qualitative study on the impact of the planning and assessment unit leadership and team composition on institutional effectiveness and compliance with accreditation standards in the higher education context.

#### Design/Methodology

Documents from 20 higher education institutions in Puerto Rico were analyzed and coded on the variables of interest. The results support the impact of organizational culture and leadership on institutional effectiveness and compliance with accreditation standards.

#### Results

The results showed that the leadership style of planning and assessment process leader characteristics and style and team composition are associated with diverse levels of institutional effectiveness and to the level of compliance with accreditation on standards in higher education as reported by the accreditation agencies and the institutional self-studies.

#### Limitations

The study is based on a qualitative analysis of accreditation documents from universities in Puerto Rico including self-studies.

#### Research/Practical Implications

The results of this qualitative study provide support for the association between unit leadership styles and accreditation team composition on institutional effectiveness and accreditation outcomes. The results of this study have practical implications for the institutions of higher education as it identifies leadership and team composition factors that can affect compliance with accreditation

standards whose non-compliance could result in serious financial consequences in institutional finances and reputation.

#### Originality/Value

This research utilizes accreditation documentation and other publically available documents from 20 institutions of higher education to analyze qualitative variables that are associated with diverse levels of institutional effectiveness and university accreditation outcomes.

### **Managing cultural diversity at work: The effects of diversity perspectives on leadership**

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#### Purpose

With globalization and changing demographics, many European workplaces are becoming more culturally heterogeneous. The aim of this study was to determine how leaders' approaches in managing multicultural work groups are linked to diversity perspectives at individual and organizational levels

#### Design/Methodology

A model of diversity management based on Berry's acculturation framework is proposed. The model describes four leadership approaches; assimilation, multiculturalism, separation, and laissez faire. A total of 149 leaders in Norway participated in the study. Leadership approaches were assessed by the Diversity Management Scenario Questionnaire (DMQ). The leaders also completed the Benefits and Threats of Diversity Scale, and questions about whether diversity was integrated into the human resource (HR) strategies of their organization.

#### Results

The results showed a strong association between separation, and leaders' expectations

that contact between employees of different ethnicities would result in intergroup anxiety. Leaders in organizations with a HR diversity strategy were most likely to endorse multiculturalism. Separation and laissez faire leadership were associated with lack of HR diversity strategies in the organization.

#### Limitations

The study is based on data from Norwegian managers only, and the possibility to generalize findings to other nations/cultures needs to be examined.

#### Research/Practical Implications

the results suggest that HR strategies at the organizational level transcend to how leaders manage diversity in their work units.

#### Originality/Value

The study test a new conceptual framework for management approaches on culturally diverse workplaces.

### **The influence of construal-level in multiple integrative negotiations**

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#### Purpose

In negotiations, the exchange of information and a focus on interests, not positions, is vital for reaching integrative agreements. Previous studies have demonstrated that in one-time integrative negotiations, high-level representations are associated with more information exchange and qualitatively better agreements than low-level representations. No research so far has explored this effect in multiple negotiations. Building on Construal-Level Theory (CLT, Trope & Liberman, 2010), we hypothesize that abstract representations not only lead to more integrative outcomes during a single negotiation, but enable negotiators to

comprehend the structure of a negotiation and to use this knowledge to reach higher outcomes in a subsequent one (i.e. learning effect). We further hypothesize that this learning effect is mediated by the subjects' judgment accuracy concerning the other party's interests developed during the first negotiation.

#### Design/Methodology

To test our assumptions, 72 university students in 36 dyads completed either an abstract or a concrete negotiation task, which was immediately followed by a concrete one. After each negotiation, single and joint outcomes were calculated and subjects' judgment accuracy was assessed.

#### Results

ANOVAs and bootstrapping supported all hypotheses.

#### Limitations

It remains to be tested whether the effect generalizes to a greater time lag between the negotiations.

#### Research/Practical Implications

The results imply that in negotiation training it might be advantageous to begin with abstract exercises, allowing participants to focus on interests and to gain insight into the structure of negotiations, followed by concrete exercises.

#### Originality/Value

To our knowledge, this study is the first to analyze the impact of abstract, high-level constructs in multiple integrative negotiations.

### **Repeated negotiations: A model test for level of aspiration theory**

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#### Purpose

Level of aspiration theory (LAT; Siegel & Fouraker, 1960) advocates the use of hardline bargaining in distributive negotiations to receive the highest possible economic outcomes. Hardline as compared to softline bargaining indeed repeatedly proved to yield better economic outcomes in single negotiations. The present study examined whether hardline bargaining is likewise recommendable in repeated negotiations and when socioemotional outcomes are considered.

#### Design/Methodology

Using a confederate, we examined whether the application of either hardline or softline bargaining would lead to more favorable results in three succeeding negotiations with student participants (N = 40). In addition to economic outcomes, participants' aspirations (i.e. negotiators' goals), duration of the negotiations and participants' socioemotional outcomes were measured.

#### Results

As hypothesized, hardline as compared to softline bargaining resulted in higher economic outcomes for the confederate in all three negotiations. Participants' aspirations consistently qualified as a mediator for this main effect. In contrast, softline bargaining resulted in shorter duration of negotiations. Softline bargaining also yielded better socioemotional outcomes for the participants, but only for the first two negotiations.

#### Limitations

Replications in field settings are desirable with professional negotiators and real world consequences.

#### Research/Practical Implications

The predictions of LAT were confirmed for repeated negotiations: Hardline bargaining is more effective in distributive negotiations - even in repeated ones.



**Originality/Value**

To our knowledge, this study is the first to explicitly test the LAT framework for repeated negotiations.

**Posters**

### **Gender stereotypes of leaders: An analysis of contents of obituaries**

#### ***Nominated for the EAWOP Congress 2013 Best Poster Award***

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**Purpose**

Women are still underrepresented in leadership positions and have to take far more obstacles than their male colleagues. This “glass ceiling” effect can be explained by a conflict of roles, which emerges due to prevalent stereotypes of women and of leaders. The present study aims to complement previous research by investigating changes in the gender stereotypes of leaders over a period of 36 years (1974-2010), pursuing the studies of Kirchler (1992) and Rodler, Kirchler und Hölzl (2001).

**Design/Methodology**

A content analysis of obituaries published in four Austrian, German, and Swiss newspapers in 2004 and 2010 was conducted. Data from Kirchler (1992) and Rodler et al. for the years 1974, 1980, 1986, 1992 and 1998 were included in a correspondence analysis.

**Results**

Though the descriptions of deceased male leaders were comparatively stable over the years, stereotypes of female and male leaders became similar. No significant differences were observed regarding the descriptions of leadership style, but males were more often

portrayed by attributes that are correlated with success.

**Limitations**

The chosen method only allows to measure the stereotypes held by obituary writers, not the actual behavior of female and male leaders. Additionally, the description in obituaries are positively biased.

**Research/Practical Implications**

Research indicates that stereotypes need to be observed over a longer period as stereotypes change very slowly.

**Originality/Value**

Changes of gender stereotypes over 36 years are investigated with an indirect method.

### **Leadership in the context of life-critical situations and high-performance**

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**Purpose**

Life-critical situations (e.g. catastrophes or combats), which are characterized by a high dynamic, complexity and absence of transparency require high-performance as well as leadership. This study explores prerequisites of effective leadership in life-critical situations and characteristics of leadership-performance in the field of action in a Bundeswehr and THW operation team. Building on different theories, with the main focus on non-routine situations (e.g. Sackmann) and/or on high-performance (Weick; Pawlowsky), an interactive model is developed, to show the most important requirements for leadership in this special context.

**Design/Methodology**

To identify the needs of leadership 23 interviews with experts from different high-performance teams from two different emergency response organizations (Bundeswehr

and Technisches Hilfswerk) were conducted, who were experienced in handling critical situations at the high risk of one's life. By means of Flanagan's CIT respondents were requested to refer one positive and one negative leadership situation within a life-critical moment.

#### Results

Content analysis affords that leadership is essential in life-critical situations, even in high-performance teams. Prominent results of this explorative study encompass: Permanent flexibility, confidence, comradeship as well as decision-making.

#### Limitations

It remains to be tested in how far the mentioned needs of leadership can be transacted into the civil leadership practice. Due to the exclusive survey group the results may only generalized to a limited extent.

#### Research/Practical Implications

Different recommendations are given for implementation in the leadership practice which refers to leaders and followers.

#### Originality/Value

To my knowledge, this study is the first conducted within high-performance teams of the German Military (Bundeswehr), which focuses on leadership in life-critical situations.

### **Meta-analytic investigation of abusive supervision in the workplace**

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#### Purpose

Over the past decade there has been a preoccupation with "dark" supervisor behaviors in the workplace. Abusive supervision, defined as subordinates' perceptions of hostile supervisor behaviors (Tepper, 2000), has mostly been

examined with single studies. We summarize the abusive supervision literature with a meta-analytic review of abusive supervision links to subordinate traits, behaviors, attitudes, and psychological functioning.

#### Design/Methodology

We searched online databases with keywords associated with abusive supervision and related outcomes. We supplemented our search with a manual search of the key articles in the area of abusive supervision and contacted researchers in the field for unpublished studies. The final number of studies included in the review was 120 relevant papers dealing with 139 separate samples.

#### Results

Following Hunter and Schmidt's (2004) meta-analytic strategy, we computed bivariate population estimates (corrected for sample size and unreliability) of abusive supervision and subordinate outcomes. Results revealed that subordinate negative affectivity predicts higher perceptions of abusive supervision. Abusive supervision is strongly correlated with relationship quality (i.e., lower leader member exchange, decreased trust in leader, and higher interpersonal injustice perceptions), subordinate behaviors (i.e., greater deviance and poorer performance), attitudes (i.e., lower job satisfaction), and psychological functioning (i.e., elevated emotional distress and more physical strain).

#### Limitations

Due to the correlational nature of the meta-analysis, we cannot conclude temporal precedence of abusive supervision influencing employee outcomes.

#### Research/Practical Implications

Our findings demonstrate a comprehensive summary the relationship between abusive supervision and employee outcomes.

#### Originality/Value

Our findings provide value by systematically synthesizing the abusive supervision literature along with unpublished studies resolving potential “file-drawer” effects.

### **An examination of the relationship between the levels of impact of the leadership development program**

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#### **Purpose**

Previous research has demonstrated contradictory findings on the relationship between the levels of Kirkpatrick model. Particularly, several studies have highlighted that learning of different competencies isn't always strongly related to its actual transfer into behavior. The current study examines the assumption that the relationship between the levels is the strongest when the content of measures is overlapping (Alliger, Tannenbaum, Bennett, Traver, & Shotland, 1997). This research is based on an in-depth evaluation of the CCL Leadership Development Program (LDP) targeted at middle managers.

#### **Design/Methodology**

This study examined the data from the End-of-Program Survey assessing the applicability and achievement of learning objectives by LDP participants (N=2479). The perceived changes in behavior were estimated through 360-degree feedback provided by the LDP participants (N=301).

#### **Results**

The correlation analyses showed that competencies corresponding in content are strongly related only between utility reaction and learning levels, and this relationship doesn't extend to the behavior transfer level.

#### **Limitations**

To evaluate learning outcomes we used not objective measures, but participants' self-reports.

#### **Research/Practical Implications**

These results imply that perceived utility and relevance of a competency are important precursors to managerial learning. This complements earlier findings on the importance of intrinsic antecedents for managerial learning. In order to further enhance the impact of managerial development initiatives, future research should look at the interaction of person-related and content-related antecedents of managerial learning. Also, it would be important to examine relationship between corresponding competencies with using objective measures of learning outcomes.

#### **Originality/Value**

To our knowledge, this study is the first to examine the relationship between measures on the three levels of Kirkpatrick model for corresponding competences.

### **Better off together than apart: A cluster analysis of self-leadership and its relationship to individual innovation in hospital nurses**

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Studies have shown that leadership and individual innovation in nursing health care are of considerable importance to assure service quality and effective patient health care in hospitals (O'Brien, Polit & Fitzpatrick, 2011; Richer, Ritchie & Marchionni, 2009, Xerri, 2012). Focusing on a notion of informal leadership - self-leadership (Manz and Sims, 1980) – instead of the traditional view of vertical influence of the leader, this study aimed at exploring the existence of different clusters of

self-leadership strategies in hospital nurses. Furthermore, we intended to extend previous work on self-leadership and individual innovation, by testing if individual innovation differs across self-leadership clusters. It is expected that hospital nurses differ concerning their use of self-leadership strategies, and that these differences will have different relationships regarding individual innovation.

288 hospital nurses from a Portuguese health care unit participated in this self-reported cross-sectional study. To analyse the data we conducted a cluster analysis. In order to verify the significance of the association between self-leadership clusters and individual innovation qui-square tests were conducted. Further, the adjusted residuals were considered in the relationship between the clusters and individual innovation.

As expected, the cluster analysis showed the existence of 3 different self-leadership clusters. Results also suggest a positive significant association between self-leadership clusters and individual innovation. These findings suggest that the use of self-leadership strategies varies across individuals from a same professional group, and that a general set of self-leadership strategies should be fostered in health care units in order to promote nursing individual innovation.

### **I expected more from you: The effects of relationships on negotiation offers**

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#### **Purpose**

Negotiation occurs with people we know and have relationships with (eg. buying a car from a friend). Negotiating with friends produces lower outcomes compared to negotiating with

strangers (McGinn, 2007). Therefore, scholars focus on understanding how relationships affect the negotiation process and why negotiating with close ones hinders negotiation outcomes. The aim of the present research is to examine how relationships affect expectations and the evaluation of negotiation offers.

#### **Design/Methodology**

A total of 128 students (105 women, 22 male) from the University of Seville, age  $M = 24.83$  ( $SD=4.17$ ) participated in this scenario study. We used a  $3 \times 3$  factorial design with the factors being relationships (best friend, friend, and acquaintance) and offers (very good, good, and bad offer). The scenario described a negotiation of buying a car (2,500€) from one of these three partners who randomly appeared depending on the condition.

#### **Results**

Analysis of variance showed that relationships influence expectations  $F(2, 117) = 3.50$ ,  $p = 0.003$ . Participants expected to receive lower prices from best friends ( $M = 1800.00$ ,  $SD = 542.92$ ), compared to friends ( $M = 2060.00$ ,  $SD = 590.11$ ) and acquaintances ( $M = 2094.11$ ,  $SD = 795.13$ ). Sequential mediation tests (Preacher, Rucker, & Hayes, 2007) showed that relationships affect expectations, which influence emotions (positive and negative) that finally affect the evaluation of negotiation offers (indirect effect = .063, bootstrap 95% C.I. = .012 -.138).

#### **Limitations**

Lab study, student sample.

#### **Research/Practical Implications**

These results help us to understand that expectations affect negotiation in relationships.

#### **Originality/Value**

This study presents a new approach in the negotiation and relationships literature.

### Testing the validity of the Team Leadership Questionnaire in a Portuguese sample of leaders from Small and Medium Size enterprises (SMEs). A suitable instrument?

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#### Purpose

The aim of this study was to test the factorial validity of the Team Leadership Questionnaire (TLQ) from Morgeson, DeRue & Karam (2010) that measures 15 leadership functions. The model proposes that these functions differ according to whether the team's performance cycle is either in a transition or an action phase.

#### Design/Methodology

276 leaders from SMEs answered to the adapted TLQ to Portuguese language through an online survey.

#### Results

The TLQ factorial structure was accessed through exploratory (EFA) and confirmatory factor analysis (CFA). From the 15 dimensions and 82 items in the original TLQ, only 6 dimensions (2 from transition phase and 4 from action phase) and 23 items were preserved. We tested four different models. Results from CFA supported the multidimensionality of the constructs and the original model of Morgeson et al. (2010).

#### Limitations

We just collected data from leaders and we did not include team member's perceptions.

#### Research/Practical Implications

Results suggest that on ongoing performance, leaders may have difficulty to clearly distinguish between transition and action phases. Maybe this means that these functions are more related to project leaders than to general managers. For SMEs, it claims the atten-

tion that these leaders distinguish more action functions than transition functions. The ones that are distinguished reflect the more informal and familiar structure of SMEs.

#### Originality/Value

We have tested the Team Leadership Questionnaire (TLQ) (Morgeson et al., 2010) in a very specific and relevant population of leaders from SMEs. We also reduced the original scale to 23 items.

### A three-level, gender-specific model of career progression

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#### Purpose

It is now generally accepted that women face additional structural and cultural barriers in progressing their careers. Despite the increasing number of studies into the possible causes and remedies of this reduced career progression, very few studies examine factors at multiple levels of corporate life. We propose a three-level, 11-factor model of gendered career progression. The model explores the relative importance and interrelationship of (1) factors related to an organization's culture and processes (e.g. objective HR processes and support for work-life balance), (2) factors related to a woman's immediate work environment (e.g. supervisor support, critical job assignments), and finally (3) factors related to a woman's individual career management behaviors (e.g. career planning and networking).

#### Design/Methodology

To test this model, we evaluated survey data from 500 women (250 from the US and 250 from the UK). The respondents were in professional and managerial roles.

### Results

Structural equation modeling conducted with SPSS supported the validity of the proposed three-level, 11-factor model.

### Limitations

It remains to be tested how the results apply to data from countries other than the US and the UK.

### Research/Practical Implications

These results imply that to understand the reduced career progression of women, factors across three different levels need to be investigated.

### Originality/Value

To our knowledge, the study is the first to evaluate the importance of career-enabling factors for women across the individual, immediate work environment and organisational context level.

## **An integrative study of the influences of personality traits and behavioural competencies on leader effectiveness**

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### Purpose

Within the person-centered paradigm of leadership, the personality approach and behavioral approach are equally influential for research and practice alike, but are hardly ever examined together (exception: DeRue, Nohria, & Humphrey, 2011). The present study proposes an integrated model of personality and behavior for leader effectiveness, such that leaders' behavioral competence mediates the relationship between personality traits and leader effectiveness. It examines this model for specific trait-competency combinations that are impactful for leader effectiveness.

### Design/Methodology

Data on personality traits (MBTI, FIRO-B), behavioral competencies (360-degree feedback) and leader effectiveness (boss-ratings) were gathered from 438 upper-middle managers as part of a leadership development program.

### Results

Overall, personality traits explained significant, but less variance in leader effectiveness than behavioral competencies. Mediation analysis using bootstrapping (Preacher & Hayes, 2004) revealed that change-oriented leadership competencies mediate the relationship between the trait of high expressed control and boss-rated leader effectiveness.

### Limitations

Most participants were company-sponsored for their development, thus are seen as high potentials. Results might not be generalizable to managers at large.

### Research/Practical Implications

Results highlight the value of an integrated model for leader effectiveness, and its multifaceted antecedents. Practically, this study confirms the value of a behavior-focused approach in leadership development initiatives in the future, raising questions of the value of personality assessments for this purpose.

### Originality/Value

To our knowledge, the first study that examines the impact of practitioner-oriented personality instruments (MBTI, FIRO-B) on leadership competencies and leader effectiveness with appropriate statistical methods and in an integrative approach.



### **Communicating respect in conflict mediation: An exploratory study**

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#### **Purpose**

Mediators are often confronted with the situation that conflicts do not base on mere injustice, but on a lack of mutual respect. According to the restorative justice approach, respect is depicted to be the essence of mediation. However, the process of respect skill communication is an under-researched topic in the field of conflict management. Therefore, the purpose of our research was to investigate which kind of respect is important in mediation processes and how conflicting parties acquire respect skills.

#### **Design/Methodology**

We analyzed semi-structured interviews with 17 mediation experts from Germany and Austria about the impact of restorative justice on the conflicting parties with regard to information about respect communication by using qualitative content analysis.

#### **Results**

Results show that the essence of mediation is about respecting each other in a horizontal way, i.e. treating others with dignity rather than respecting each other vertically i.e. referring to their status. Furthermore, five themes relevant for respect learning in mediation were identified: (a) creation of learning-conducive conditions, (b) instrumental conditioning, (c) relation to conflicting parties' environment, (d) cognitive reappraisal, and (e) mediator as role-model.

#### **Limitations**

For the results base on explorative, qualitative data, we encourage future research to enrich

these findings by conducting quantitative studies.

#### **Research/Practical Implications**

In conflict management settings, mediators should emphasize horizontal respect and, above all, teach respectful behavior in being a respectful role model.

#### **Originality/Value**

This is the first study to investigate respect in mediation settings. Besides, a model of respect learning processes in mediation was outlined emphasizing horizontal respect as prominent factor of successful conflict mediation.

### **The personality traits and motivational traits specific to performant leader in military organization**

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The present research aims to investigate the relationship between the achievement motivation as global orientation of behavior and other specific personality characteristics relevant in organizational context. Thus, we propose (1) To identify personality traits and achievement motivation relevant for performance, and (2) To identify the personality variables needed to be efficient as leader in the military organization.

**Methodology:** We intended to develop a psychological profile of the military employee by applying Fleishman Job Analysis Survey, and to investigate (with NEO PI-R and CPI) the relevant personality traits for performance in the above-mentioned organization; then we applied Achievement Motivation Inventory (AMI) to identify an optimal motivational profile. Finally, we analyzed correlations identified between the facets measured by NEO-PI-R and motivational variables, and the correlations between CPI scales and AMI scales, fo-

cusing on personality variables needed to be performing as manager in military organization.

**Participants:** The group of subjects consists of military with higher education, with military experience ranging from 5 to 15 years.

The results show some specific characteristics, due to organization, and because the purpose of this approach was to identify the dominating motivation needed to be exploited in the context of personnel selection. Practical usefulness derives from the need to exploit the results in the context of drafting a strategy for recruitment, for designing development programs and for organizational optimizing.

### **Age power into work - Solution to age management**

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#### **Purpose**

Finnish Government programme 2011 has set up a Leadership Development Network to focus on leadership skills and disseminate them to Finnish workplaces. Age Management (AM) must be improved to ensure that age-related factors are paid more attention in everyday leadership.

#### **Design/Methodology**

As solutions FIOH has developed an international three-day-training programme named Age-Power-into-Work™ (AP), established networks of Age-Power™ Coaches and an AM-Training-Consortium: Also internet will be used.

The starting point is to recognize the critical age-related factors for the function of the organization and to utilize this knowledge in management and leadership operations. The AP-training improves the awareness in age-related matters, changes the attitudes more positive towards ageing, and enhances work-

ing, need-based solutions for age-related challenges of companies. When age is a resource we should prevent work ability problems, recognize, utilize and make best use of the strengths of different age groups, and see that wellbeing and productivity goes hand in hand. Target groups are managers and HRM.

The networks give knowledge of the impressiveness of the AP-training concept and needs of companies as well as an overview of AM-training models and their supply and demand in Finland. Internet spreads the AM-material widely and wakes up open discussion between managers.

#### **Results**

128 trained AP-Coaches build a network. AM-needs are recognized, action plans made. The work is going on.

#### **Limitations**

Difficult to evaluate how widely/deeply the idea of AM will spread into companies countrywide.

#### **Practical Implications**

This wide approach enables awareness raise of age-related-issues, attitude changes and solutions in Finnish companies.

### **Creating leadership communities of practice – Breaking through organizational silos**

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#### **Purpose**

The paper will present a number of case studies of how creating Leadership Communities of Practice changes organizational culture and breaks through departmental silos to achieve greater effectiveness.

#### **Design/Methodology**

Leadership Communities of Practice were created in a number of different Australian

organisations with the aim of creating peer support, coaching and interchange of ideas with managers from different functional areas. In all cases there was deliberate support and empowerment from senior management to the initiatives. In all cases the process relied on a group of facilitators coordinating the discussions, learning, communications and interactions of participating colleagues. The facilitators were trained in facilitation skills, and throughout the initiative were coached by a lead facilitator supporting them, encouraging them and guiding them to make decisions and effect change in their community of colleagues.

#### Results

Organizational silos were broken, effectiveness and productivity were increased and communication improved. Leadership skills were enhanced and cohesion in each organisation was evident.

#### Limitations

All three organisations were not-for-profit organisations and hence more research in the for profit sector is needed.

#### Research/Practical Implications

The effects of peer support, peer coaching and leadership communities of practice on organisational effectiveness and culture change are important areas for more research. The implication to greater effectiveness in a fast changing work environment can not be understated.

#### Originality/Value

The utilization of communities of practice as a Leadership Development initiative is worth pursuing as it increases leadership capacity and capabilities in the workforce.

### Leadership success factors in project management

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#### Purpose

The success of project teams often depends on the quality of their leadership. The theory of social energy is a framework that explains the process of success creation in social systems in general and in project teams in particular. The theory is derived from three conceptions: (1) Grawe's consistency theory, (2) the social identity perspective and (3) Bruch's organizational energy. Accordingly, we hypothesize that project managers need to activate five success factors to mobilize their teams: accomplishment, clarification, resource activation, problem actualization and a positive group identity.

#### Design/Methodology

A field experiment with 500 project team members tests and refines the theory of social energy. The field experiment methodology and the broad set of measures (i.e., behavioral data, objective measures and three subjective measures) offer high validity.

#### Results

First analyses support the theory of social energy with correlations up to  $r = .65$ .

#### Limitations

It remains to be tested how much our results generalize to fields outside leadership and coaching in organizations.

#### Research/Practical Implications

The theory of social energy is a comprehensive framework that in the interest of parsimony streamlines and integrates a multitude of empirically supported concepts that are scattered across different lines of research on leadership and group success. In addition, the

developed leadership training offers a scientifically evaluated technology for companies to increase their project success.

#### Originality/Value

To our knowledge, this study is the first to experimentally field-test a broad theory of leadership success based on behavioral and objective measures.

### **The contribution of senior managers' skills to safety commitment**

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Literature reviews and meta-analyses in the safety literature have identified the safety commitment of senior managers as crucially influencing organisational safety. Despite this highlighted relevance, it is not yet fully understood what attributes enable senior managers to show their commitment to safety. Our study investigates this issue through a focus on senior managers' skills, namely social competence, problem-solving and safety knowledge. Structured interviews, consisting of open questions and scenarios, were carried out with a sample of senior managers (N=60) working in air traffic management. Hierarchical regression analysis mainly showed aspects of problem-solving as contributing to safety commitment. More specifically, the ability to consider a number of issues when understanding a problem, the number of information sources considered to understand a problem and the generation of ideas aimed at changing the organisation's culture, significantly contributed to safety commitment. Furthermore, safety knowledge was found to be related to safety commitment, but only of a lower significance level ( $\alpha < .10$ ), whereas social competence was not related to safety commitment. Accordingly, problem-solving

can be proposed as crucially contributing to safety commitment. This finding indicates that interventions, trainings as well as future research are likely to benefit from a focus on problem-solving. Future research should consider, whether specific qualities in the ways in which senior managers approach safety related problems might be beneficial for their positive influence on safety.

### **The interactive effects of leader self-sacrifice and leadership behavior on follower trust and identification**

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#### Purpose

Leadership behaviors tend to be effective when followers are accepting of a leader's directives. One method for becoming a good leader is to build trust among followers. A leader's willingness to self-sacrifice might aid the leader's effectiveness (e.g., De Cremer & van Knippenberg, 2004).

The present study aimed to examine the interactive effect of a leader's self-sacrifice and behaviors on leadership trust, group identification, and work performance. Leadership behaviors were classified by task and person-focused behaviors. When a follower perceives a leader as self-sacrificing, a follower is likely to trust the leader, identify more with the group, and show improved work performance.

#### Design/Methodology

A survey was conducted among 257 undergraduates working part-time jobs in Japan. Participants answered questions related to leadership behavior, leader self-sacrifice, trust in a leader, group identification, and work performance.

#### Results

Findings showed that a leader's self-sacrifice had a positive effect on leadership trust and

group identification but no effect on work performance. A moderated regression analysis revealed that when leader self-sacrifice was high, person-focused leadership behavior was positively related to group identification and work performance.

#### Limitations

Findings were obtained from university students engaged in part-time employment. Additional research is needed with other samples (i.e., full-time employees).

#### Research/Practical Implications

Our results suggest that leader self-sacrifice is effective in building trust among followers.

#### Originality/Value

This study identified that leader self-sacrifice is an important moderator of the leader-follower relationship.

### Values communication in charismatic relationships

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#### Value, Purpose, and Implications

The leadership literature has long noted the critical role of values in charismatic leadership. Charismatic relationships are characterized by similarity between the values of leader and follower; it is in part through this value congruence that charismatic leaders can elicit heightened motivation and performance. Charismatic leaders, then, are expected to effectively communicate important values to followers; however, this idea remains empirically uncorroborated. Our purpose is to assess the extent to which charismatic relationships are indeed characterized by effective communication of leader values. Doing so will shed light on the extent to which values communication should be emphasized by those seeking

the positive organizational outcomes that can result from charismatic relationships.

#### Hypothesis and Methods

Our hypothesis is that due to the heightened value-communication skills of charismatic CEOs, top management team (TMT) members working under charismatic CEOs should have more accurate perceptions of their CEOs' values than TMT members with non-charismatic CEOs. Using a survey design, we collected data from 79 CEOs and 250 of their TMT members concerning (1) the organizational values of the CEOs, and (2) TMT members' perceptions of their CEOs' values. Taking charisma as a fundamentally attributional phenomenon, we also collected data concerning TMT members' perceptions of the charisma of their CEOs. We will use OLS regression to test the hypothesis. Support for the hypothesis will be indicated if the average difference between CEOs' self-reported values and their top managers' perceptions of those CEOs' values is significantly smaller for charismatic CEOs than for their non-charismatic counterparts. (At this date we have no results to report.)

### What do leaders think of followers – an analysis of implicit followership theories (IFTs) in Germany

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#### Purpose

We assessed implicit followership theories (IFTs) with the IFT scale (Sy, 2010) and measured their impact on leadership outcomes in Germany. While previous research mainly focused on the direct behavior of leaders, IFTs' aim at showing perceptions of leaders to followers. We tested two hypotheses: (1) that leaders' perception on their followers can be differentiated into a followership-prototype and a followership-antiprototype and (2) that this leader perception impacts the expected

job satisfaction, performance, commitment and motivation of followers.

#### Design/Methodology

288 workplace-leaders participated in an online study. We adapted the original scale of Sy (2010) to typical German perceptions of followers. To investigate the influence of IFTs to leadership outcomes we also assessed job satisfaction, performance, commitment and motivation of the followers.

#### Results

Using a maximum-likelihood confirmatory factor analysis with Mplus partly replicated the model of Sy (2011). Leaders' followership-prototype was positively related to job satisfaction, performance, commitment and motivation and leaders' followership-antiprototype was negatively related to job satisfaction, performance, commitment and motivation. The results provided support for the relevance of IFTs for leadership outcomes.

#### Limitations

IFTs show a high resemblance with implicit performance theories (IPTs) and have to be further investigated. Dyads of leaders and their followers were not assessed.

#### Research/Practical Implications

Our findings can contribute to a broader understanding and a holistic view on leadership.

#### Originality/Value

The present research closes a gap in leadership research by addressing followership and by applying IFTs to another cultural context.

### **Who is a better negotiator? A cross disciplinary comparison between economics and psychology**

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#### Purpose

Previous research showed that, while in negotiations, asking questions and talking about each other's needs leads to a higher mutual outcome, unethical strategies like lying, deception and manipulating one's opponent neither helps the negotiator nor increases the mutual outcome. This survey study investigates and explains differences of psychology and economics students in their consideration of certain negotiation strategies to be appropriate.

#### Design/Methodology

Psychology and economics students (N = 210) rated the appropriateness of unethical strategies and adding value strategies. To identify the origin of differences of the disciplines, the length of study and the personality traits Extraversion, Agreeableness, Conscientiousness, Neuroticism, Openness and Machiavellianism were tested as predictors for the consideration of negotiation strategies to be appropriate.

#### Results

As stated in the hypothesis, economists were found to consider unethical strategies as more appropriate than psychologists, while psychologists consider adding value strategies more appropriate. While the consideration of unethical strategies to be appropriate for economists could be predicted by the personality traits Openness and Machiavellianism, for psychologists the consideration of adding value strategies could only be predicted by their length of study.

#### Limitations

Students have limited experience in negotiations.

#### Research/Practical Implications

In order to improve the economists' consideration of strategies and therefore increase the negotiation outcome, psychological content



should be integrated into the regular economic study schedule.

#### Originality/Value

This study is an interdisciplinary project between psychology and economics and the universities Hamburg and Maastricht. It is the first direct comparison of psychology and economics students in negotiation strategies, considering personality traits and the length of study.

### **Culture and perceived mediation effectiveness and strategies in interest and rights conflicts**

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#### Purpose

The goal of this research is to investigate mediation effectiveness of and strategies in Chile and Spain. Effectiveness was examined in legal and interest-based conflicts.

#### Design/Methodology

Professional mediators from Spain (N=77) and Chile (N=14) responded a questionnaire about mediation strategies (Lim and Carvenale, 1990) and perceived effectiveness. The data were analyzed at the individual level. A factor analysis supported a tridimensional model of mediation strategies in the two cultures. The strategies are Reflexive, Contextual and Substantive.

#### Results

Indirect effects analysis (Preacher, Rucker and Hayes, 2007). Results show cultural differences in the use of strategies and mediation effectiveness. The greater effectiveness of mediation in Chile compared to that of Spain could be due to the Chilean labor mediators make greater use of contextual strategies (M=4.25) and reflective (M =4.32) in conflicts of rights and interests as less use of substan-

tive strategies (M =1.97) in both types of conflicts. Furthermore, the use of strategies mediate the relationship between culture and mediation effectiveness.

#### Limitations

It remains to be tested how much our results generalize to other cultures.

#### Research/Practical Implications

We present evidence about differences in mediation effectiveness and strategies and their legal and interest-based conflicts in two cultures. The results are analyzed considering the organizational and functional structure of the mediation systems.

#### Originality/Value

To our knowledge, the study is the first to systematically analyze mediators' strategies and effectiveness in two countries. The great value of this research is that professional mediators in two different countries provided the data, which has merit because the sample is difficult to access.

### **A systematic approach to psychosocial risk management: A secondary analysis of the ESENER survey**

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#### Purpose

Studies show that there is a gap between legislative demands to manage psychosocial risks and practice observed in European enterprises. Experts indicate that a holistic approach to

managing psychosocial risks is especially effective and should be promoted. The study aimed at examining a conceptual framework of a systematic psychosocial risk management based on the risk management paradigm.

#### Design/Methodology

In 2009 EU-OSHA carried out the 'European Survey of Enterprises on New and Emerging Risks' (ESENER), covering establishments with 10 or more employees across 31 countries. The survey asked managers and workers' representatives about the way psychosocial risks are managed at their workplace.

#### Results

A factor analysis allowed distinguishing sets of practices (six items) that can be treated as a single indicator of the psychosocial risk management, confirming that there is a tendency among European enterprises of different sizes to manage psychosocial risks using a coherent, systems-based approach. About 30% of all establishments reported implementing at least four aspects of the management system for psychosocial risks, around 3% reported implementing all six aspects, and 12% were not reporting implementing any aspects. Relationships of psychosocial risk management with enterprises characteristics (size, sector, or country) were also analysed.

#### Limitations

ESENER survey did not cover all possible aspects of a systemic approach to manage psychosocial risks, and the concept should be further explored.

#### Research/Practical Implications

Factors such as regulatory style, organisational culture and organisational capacity play an important role in the psychosocial risk management, and offer a potential route for improving workplace management of psychosocial risks across Europe.

### **Portrait of ideal leader and reality in Lithuanian organizations: subordinates' perspective**

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Followers' perspective of ideal and real leader emphasizes the idea that effective leadership allows predicting successful functioning of an organization. However it depends on the subordinates: how they evaluate leadership and if it is acceptable to them (Yukl, 2008; 15<sup>th</sup> EA-WOP conference, 2011).

#### Purpose

The main aim was to identify characteristics of ideal leader that are important to Lithuanian employees and to compare this portrait with reality.

#### Design/ Methodology

Research sample consisted of 505 subordinates – employees from 20 various size subdivisions (13 different-type organizations) under the leadership of a direct middle manager. Participants were asked to give three main characteristics of an ideal leader using free-form. To assess perceived leader prototypicality single item graphic scale was chosen (Shamir, Kark, 2004). Modified Leadership Effectiveness questionnaire indicated subjective subordinates' judgment on main leadership activities performed by a real leader (Heck, Johnsrud, Rosser, 2000).

#### Results

Summarizing portrait of an ideal leader it could be stated that followers highlighted variety of emotional aspects of leadership. The average fit between a real leader and a vision of a desirable leader was 55 percent. Subordinates' judgment on main leadership activities depended on gender of a real leader and organization's particularity (type, size).

**Limitations**

There were no measures for objective criteria of leadership effectiveness.

**Research/ Practical Implications**

Results of this research in Lithuanian context add to international data of leadership effectiveness and propose guidelines for practice: especially concerning direction of leadership development.

**Originality/ Value**

Working adults shared their views about real and ideal leaders. There was a possibility to compare those opinions depending on organizational factors.

### **The influence of leadership gender and industry type on investment behaviour**

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**Purpose**

Previous research has shown that women are preferentially selected for leadership positions in times of crisis (glass cliff effect, Ryan & Haslam, 2005). Moreover, a negative correlation between female CEOs and stock price has been found. We hypothesize that this phenomenon is due to a reverse glass cliff effect. Potential investors prefer stereotypically male companies (e.g. IT) with a male CEO to stereotypically male companies with a female CEO, because they assume that a company with a female CEO is one in crisis.

**Design/Methodology**

To test our assumption, a questionnaire with a 2 (leadership gender: male vs. female) x 2 (industry type: male vs. female) within-subjects design was developed. Participants (N = 142 university students) were presented with four different company descriptions and asked to invest a given fictitious budget in these companies. Furthermore, we used rat-

ings of agentic and communal adjectives to assess the subjects' impressions of the companies.

**Results**

A RM-ANOVA did not support our hypothesis. Instead, a main effect for industry type was found. Subjects invested most of their money in stereotypically male companies, regardless of the CEO's gender. Male companies also were perceived as more agentic than female ones.

**Limitations**

In future, the general attractiveness of a company for an investment should also be considered.

**Research/Practical Implications**

The results imply that regarding investments, stereotypically male companies are preferred to female ones, even if they have a female CEO.

**Originality/Value**

To our knowledge, this study is the first to analyze the influence of leadership gender and industry type within an experimental design.

### **The think manager-think male stereotype - Malleable or stable?**

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**Purpose**

Stereotypes about leadership still represent a potent barrier to women's advancement to leadership roles. Successful leaders are perceived to possess predominately agentic traits (e.g., assertive, dominant) that are more similar to those ascribed to men than women. This perceived incongruity of people's beliefs about leaders and women underlies prejudice against women leaders (Eagly & Karau, 2002). Thus, an important question is whether such

stereotypical beliefs about the traits of leaders, men, and women incorporate change or stability over time.

#### Design/Methodology

To examine this question, 235 Irish business students (113 men, 122 women) rated a target group's characteristics (men, women, middle managers) as of a specific time (50 years ago, present, 50 years into the future) on gender-stereotypical traits.

#### Results

Following Schein's (1973) approach, intraclass correlation coefficients estimated the extent to which the stereotype of managers was similar to that of men or women. The results showed a large, significant correlation between the stereotypes about men and managers within each time condition and overall. In contrast, the women-manager correlation was negative and nonsignificant overall. However, this negative correlation weakened from the past to the present and became positive and marginally significant for the future.

#### Research/Practical Implications

Altogether the results suggest that people perceive stereotypes about leaders to be more similar to men than to women. These perceptions may continue to function as impediments to women leaders' advancement despite the trend over time toward female-manager similarity.

#### Originality/Value

To our knowledge this is the first study to systematically test perceptions of change in the think manager-think male stereotype over time.

### **Perceptions and motivation in maximum performance situations: A question of supervisory leadership style?**

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#### Purpose

We usually use supervisory evaluations to estimate employees' typical performance. Yet, Sackett et al. (1988) found that supervisory ratings of supermarket-cashiers' performance correlated higher with cashiers' maximum than with their typical performance.

The presence of a supervisor may make people perceive the situation as more 'maximum', enhancing their level of motivation and performance. Yet, supervisors differ in their leadership style. Compared to autocratic leaders, empowering leaders should (a) enhance performers' task-valence, enhancing task-motivation and performance, and should (b) create less of a maximum performance situation than the presence of an autocratic leader.

#### Design/Methodology

2\*2 laboratory experiment: 76 participants completed a class-scheduling task under either an empowering or an autocratic experimenter who was mostly absent (typical) and shortly present (maximum) during the experiment. Participants indicated their perception of the situation and motivation.

#### Results

A two-by-two ANOVA on the perception of the performance situations and path analyses from perceptions via motivation to performance, including the effects of leadership style, supported the assumptions.

#### Limitations

Laboratory setting.

**Research/Practical Implications**

Overall, results confirm basic assumptions of the typical-maximum performance distinction, yet also suggest that autocratic supervisors may indeed be allowed to only witness employees' maximum, rather than their typical performance, a finding with strong implications for the literature on supervisory performance appraisals. Yet, results on empowering leadership also show boundary conditions to assumptions of the typical versus maximum performance literature.

**Originality/Value**

This study is the first to combine research on typical versus maximum performance with that on leadership, showing meaningful implications for both.

**Coaching of captains**

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**Purpose**

Safety is important in the work of pilots. It is ensured by smooth co-operation of pilots, which requires good communication in the cockpit. Even though the captain is in charge of the flight, the captain and the co-pilot work together in a situation of shared leadership (Pearce et al). An airline wanted to increase the readiness of fresh captains by individual coaching as a part of their captain curriculum.

**Design/Methodology**

First, captains were reassessed to get some up-to-date information about their working style. Then, they had a feedback discussion with the psychologist about reassessment results and about willingness and aims concerning coaching. In addition, the airline was able to treat captains five more sessions of coaching.

Between the sessions the captains did home work evaluating their values of life and as-

sessing their feelings, thoughts and actions in demanding situations, which were talked through during the sessions. For the last session the captains wrote a short evaluation of the coaching process.

**Results**

Coaching improved leadership skills and cockpit co-operation. In a survey concerning the efficacy of coaching the captains estimated it to be 4.4 on a five point scale.

**Limitations**

Unfortunately those captains, who really need coaching, are not necessarily interested in it.

**Research/Practical Implications**

The captains were very grateful for the opportunity for coaching. Other superiors have shown interest in coaching, too.

**Originality/Value**

To my knowledge, competent professionals in airlines have not been coached earlier systematically to increase well-being and atmosphere.

**Leaders set the tone for the stressor-strain relationship**

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**Purpose**

Leaders are influential transmitters of role expectations, however, few studies address the extent to which the tone they set affects stressors and strains. Focusing on Bass's Leadership Model and Kahn et al.'s role theory, we hypothesize that role stressors will mediate the relationship between leadership style and strains.

**Design/Methodology**

U.S. hospital nurses completed two paper-pencil surveys. T1 data were gathered from 118 nurses, of those 77 also completed the T2 survey. Measures included leadership styles:

transformational (TFL) and laissez-faire (LF); role stressors: overload, ambiguity, conflict; and strains: general well-being, tedium, affective and continuance commitment, turnover intention, work-life imbalance, and organizational identification.

#### Results

T1 stressors mediated the relationship between leadership style and T1 and T2 strains. TFL negatively and LF positively related with stressors, which positively related with strains. Although the amount of variance stressors accounted for in strains did not change in the TFL context, TFL accounted for less variance in strains. Conversely, stressor-strain relationships intensified in the context of LF, while LF variance in strains disappeared.

#### Limitations

The cross-sectional nature of the T1 survey and small T1-T2 matched sample are potentially limiting generalizability. Replication with a larger matched sample is desirable.

#### Research/Practical Implications

Leadership style sets the tone for subordinates' perceptions of stressors and manifestations of strains. TFL (vs. LF) sets a healthier tone, suggesting that leadership training must emphasize the beneficial effects of TFL and clarify the deleterious effects of LF.

#### Originality/Value

This study extends Lyons and Schneider's experimental study among students by collecting field data at two times, addressing LF and TFL, and recognizing leadership as a contextual factor influencing stress.

### **The influence of leader behavior on role ambiguity in horticultural cooperatives: Mediating effect of organizational climate**

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#### Purpose

This study examines the mediating role of organizational climate in its four dimensions: rules, innovation, goals and support, in reducing role ambiguity as a result of leaders' behavior.

#### Design

The sample consisted of 315 Almería horticultural cooperative workers who reported formal leaders' communication and planning behaviors, the employees' degree of role ambiguity, and the organizational climate prevailing in their organization.

#### Results

Results are consistent with a model in which the organizational climate within the organization exerts a mediating effect between role ambiguity and the two leadership behaviors analyzed. The mediating effect of the dimensions of climate varies between 13.29% and 31.96% of the variance in the relationship between communication leadership and role ambiguity. Moreover, the mediating effect varies between 11.08% and 29.15% of the variance in the relationship between planning leadership and role ambiguity.

#### Limitations

This work has two important limitations, it is a cross-sectional study, and, in addition, it focuses on a single productive sector.

#### Practical implications

Some recommendations for the leaders of the organizations about the implementation of



human resources practices and the reduction of levels of role ambiguity are proposed.

#### Originality

We can emphasize that it is the first time a work like this is performed in such a specific productive sector and in such an important local and national economic activity.

### **The interplay of perceived leadership from faces and facial width-to-height ratio for the prediction of leadership emergence among males**

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#### Purpose

First impressions from faces have been positively related to leadership emergence, while objective facial structure (i.e. facial width-to-height ratio) correlates positively with perceived aggression, actual aggression, unethical and exploitative behavior. However, it is currently unclear how the interplay of male facial width-to-height ratio (fWHR) and perceived leadership from faces relates to leadership emergence. We hypothesize, that the positive relationship between perceived leadership and leadership emergence will be lower when the leader has a high fWHR.

#### Design/Methodology

Here we examined fWHR and perceived leadership from faces in a male sample from the working world ( $n = 130$ ). Perceived leadership from faces was rated by an independent sample of 27 participants, while fWHR was numerically measured by 4 independent research assistants. Leadership emergence was operationalized as achieved hierarchical level in management.

#### Results

Moderated regression analysis revealed that there was a positive main effect of perceived leadership from faces on leadership emer-

gence. Moreover, fWHR moderated this effect, such that the positive relationship was lower when the leader had a high fWHR.

#### Limitations

The cross sectional design does not allow inferring causality, albeit fWHR should be stable since puberty.

#### Research/Practical Implications

When examining the impact of first impressions from faces on real world outcomes researchers should also consider the impact of fWHR and their joint effects.

#### Originality/Value

This is the first study that investigates the interplay of first impressions from faces and stable facial structure for predicting leadership emergence.

### **Executive coaching: A proposal of a competence executive coaching model based on the literature review**

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#### Purpose

The current transformations in societies and work contexts are putting managers in ambiguous situations and with consequent impact on the leadership profile adapting to those changes. It is in this context that arise the executive coaching models and coaching programs that aim therefore to help leaders develop new attitudes and skills and to achieve organizational goals. Empirical research on executive coaching, however, has lagged far behind, and theoretical work on the processes underlying effective coaching has been limited. Consequently, the purpose of this work is planning a competence executive coaching

model based on the literature review. It also provides a conceptual framework of the various models of executive coaching executive coaching.

#### Design/Methodology

In this literature review of executive coaching models we investigated the construct of executive coaching and examined different executive coaching models, client characteristics, and the impact of the different models on the effectiveness of the intervention.

#### Results

The main findings is the description of a competence model in terms of the distinct coaching intervention phases, and the competencies required in each limitations.

#### Limitations

Because the research on executive coaching is in its beginnings, the literature from related areas such as mentoring, career success, 360-degree feedback, and training and development need also to be reviewed.

#### Research/Practical Implications

Based on the various models of executive coaching, the main finding is an attempt to competence executive coaching model for coaches and trainers in planning, implementation and evaluation of executive coaching interventions.

#### Originality/Value

The contribution of this work will provide coaches and trainers a structured model for interventions with leadership in Portugal.

### Health relevant leadership dimensions – Development of a questionnaire

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#### Purpose

Leading and business culture have an important effect on the psychological and physical health of employees. On the other hand healthy leaders and healthy employees can support and strengthen the whole organization and provide an essential input for organizational success. Strong and healthy leadership can maintain competitiveness, ensure productivity and therefore it has a great impact on job security.

#### Design/Methodology

To measure the behavior patterns of leaders in regard to healthy leading a questionnaire with 40 items and with the following eight scales was constructed: Health awareness, feedback, work strain, latitude, reward, community, fairness and values. The new instrument was tested in several online surveys and in two employee surveys. Two different samples, one with 299 leaders and one with 430 employees, resulted.

#### Results

The results of the reliability analysis show high coefficients for the eight scales, they range between .89 and .94.

#### Limitations

Further studies should also include the direct assessments of leaders and their employees.

#### Research/Practical Implications

Through the relatively short questionnaire it is possible to assess health relevant behavior strategies of leaders. This can be used to give feedback for single leaders and also to develop intervention strategies for the organization.

#### Originality/Value

With this new instrument it will be possible to design and adapt workshops for leading in a more efficient way. The instrument will not only help employees, but also leaders to improve their behavior and to improve the work-

ing life and also the competitiveness of the organization.

### **Leaders as role models: The relationship between leader and follower organizational citizenship behaviors**

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#### **Purpose**

Employing a social learning framework, this study investigated the relationship between leader and follower organizational citizenship behaviors (OCBs). The degree to which followers identified with leaders as well as how frequently they interacted with leaders were examined as potential moderators. Based on social exchange processes, it was furthermore predicted that the relationship between leader and follower OCBs was partially mediated by followers' perceived organizational support.

#### **Design/Methodology**

This study used a sample of 281 leaders and 1034 followers employed at 27 substance abuse facilities across the United States. Data were collected on-site through paper-and-pencil surveys. Leaders rated on average four followers. Hierarchical regression was employed to analyze the predicted hypotheses.

#### **Results**

Results were in partial support of the hypotheses and showed that leader OCBs are both directly and indirectly related to follower OCBs. Followers' perceived organizational support partially mediated the relationship between leader and follower OCBs. Neither identification with leader nor frequency of interaction moderated the relationship between leader and follower OCBs.

#### **Limitations**

One limitation of the study is that direction of causality could not be unequivocally determined due to the research design used.

#### **Research/Practical Implications**

These findings have important implications for leader development and training in that leaders should be encouraged to both engage in OCBs and ensure their visibility to followers.

#### **Originality/Value**

This study extends findings from Yaffe and Kark (2011) and underlines the importance of leader OCBs for follower OCBs. Furthermore, it demonstrates that leaders represent agents of the organization, as leader behaviors were directly related to followers' perceptions about their organization.

### **Psychological capital as mediator between transformational leadership and adaptive performance**

#### ***Nominated for the EAWOP Congress 2013 Best Poster Award***

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#### **Purpose**

Transformational leadership is often discussed as change-oriented leadership. Surprisingly, only few studies have examined its impact on behavioral outcomes in change processes and the underlying psychological mechanisms of this relationship. We hypothesize that transformational leadership increases followers' psychological capital which in turn leads to higher levels of adaptive performance.

#### **Methodology**

We conducted a cross-sectional survey among employees in the U.S. Financial Service Industry (N= 436). Measures were from the MLQ, the PCQ and the individual adaptive perfor-

mance scale. We controlled for age and applied procedural and statistical control for common method bias.

#### Results

Results from structural equation modeling showed a significant positive indirect effect of transformational leadership on adaptive performance via psychological capital. The remaining direct effect, however, was negative, indicating competitive mediation. I.e. negative side effects of transformational leadership in change processes may be masked by its positive effects until these are partialled out.

#### Limitations

Future longitudinal studies will shed more light on issues of reciprocity and spiral effects. Such studies may also include multiple mediators, especially of opposite sign, e.g. follower dependency.

#### Practical Implications

Transformational leadership training may help managers to increase their followers' level of adaptivity, however, they might also consider potential risks of this leadership style. Further, trainings for psychological capital appear as suitable interventions to accompany change.

#### Value

Transformational leadership was related to adaptive performance in change processes, while psychological capital turned out as a psychological mechanism suitable to explain this relationship. Further, there may be "two faces of transformational leadership" whereas its negative effect attenuates overall possible levels of adaptive performance.

### **On the motivational effects of transformational leadership on employee functioning**

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#### Purpose

Transformational leadership is largely viewed as a prerequisite for organizational success. However, little is currently known about the motivational processes through which transformational leadership exerts its effects. The present study extends past research by developing a model that builds on transformational leadership and self-determination theory to better understand the motivational effects of leaders on employee functioning (emotional exhaustion, turnover intention, and job performance).

#### Design/Methodology

Data were collected at two time points 12 months apart from a sample of 630 nurses in Quebec, Canada.

#### Results

Results from SEM analysis support the hypothesized model. Specifically, transformational leadership had a positive effect on autonomous motivation and a negative effect on controlled motivation. Taking into account the cross-lagged effects of transformational leadership on work-related outcomes, autonomous motivation had a negative effect on emotional exhaustion and turnover intention but a positive effect on job performance. Neither of the three lagged effects of controlled motivation was significant.

#### Limitations

Despite the use of a longitudinal design, a data panel based on more than two time points and a longer study period would be more informative with regard to the lagged effects. In

addition, other data sources should be included in future studies.

#### Research/Practical Implications

The results highlight the potential importance of autonomous motivation in organizations, especially with respect to employee attitude, strain, and performance.

#### Originality/Value

This study advances the understanding of why work motivation acts on employee functioning and how leaders can play an active role in this process.

### **The moderating role of perceived unit culture in the relation between transformational leadership and empowered behaviors**

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#### Purpose

Transformational leadership (TL) is associated with performance and innovative behaviors ( $.20 < \text{weighted correlation} < .30$  according to Wang et al.'s [2011] meta-analysis). However, contextual variables may influence TL's effects (Porter & McLaughlin, 2006). This study tests the hypothesis that TL is related more strongly with employees' empowered behaviors when a culture of challenge and innovation, as well as high and explicit performance norms, are present within the work unit. It is further expected that the highest level of empowered behaviors will be observed when both cultural dimensions and TL are high.

#### Design/Methodology

A survey including measures of TL ( $\alpha=.97$ ), perceived unit culture (challenge and innovation:  $\alpha=.91$ ; performance norms:  $\alpha=.67$ ) and self-reported empowered behaviors (consci-

entiousness, improvement efforts, collaboration and organizational involvement:  $.86 < \alpha < .90$ ) was distributed to employees of a large public organization ( $N=1,808$ ).

#### Results

Hierarchical multiple regressions were used to test the hypothesis. As expected, TL is more related to empowered behaviors when there is a higher culture of challenge and innovation (mean  $b' + 1sd = .18$  vs. mean  $b' - 1sd = .04$ ) and higher performance norms in the unit (mean  $b' + 1sd = .20$  vs. mean  $b' - 1sd = .07$ ). Three way interactions suggest that for two empowered behaviors, levels are highest when all three predictor variables are high.

#### Limitations

The cross-sectional nature of this study precludes conclusion on causality.

#### Research/Practical Implications

This study suggests that a favorable culture within the work unit might be a pre-requisite to observe TL effect on employees' behaviors.

#### Originality/Value

This study was conducted at the beginning of an organizational change effort, which implies varying levels of culture favorability to TL in different units.

### **Does people orientation reduce perceived effectiveness in leadership? Surprising results from three experimental studies**

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#### Purpose

In the leadership literature, there is consensus that leadership effectiveness is associated with two basic dimensions: people orientation and task orientation. In the present work, I aim to show that observers use a compensatory biased process when evaluating leaders in the former domain, such that people orienta-

tion leads to lower perceived effectiveness in task-related leadership activities.

#### Design/Methodology

I conducted three experimental studies (Study 1, N=181 undergraduate psychology students; Study 2, N=113 graduates in a business administration course; Study 3, N=181 undergraduate business students) in which participants were asked to rate leaders with different degrees of people orientation in perceived effectiveness in general organizational tasks.

#### Results

Analyses supported the hypothesis that people orientation reduces the degree to which participants rate leaders as effective in organizational task-related activities. Leader sex did not moderate these effects.

#### Limitations

It remains to be identified what moderating variables, such as individual characteristics or contextual pressures, influence the extent to which people orientation is negatively related to effectiveness.

#### Research/Practical Implications

This study suggests that, when making judgments of leaders, observers tend to perceive the two basic dimensions of leadership, namely task and people orientation, as opposed dimensions that are related in a negative way.

#### Originality/Value

Leadership research using correlational analyses suggest that the task and people oriented dimensions of leadership are independent, but only a limited number of studies have approached the question from an experimental point of view. The current experimental approach served to better identify the opposing nature of the two leadership dimensions.

### **A cross-cultural comparison of the effects of transformation leadership on follower engagement and performance**

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#### Purpose

The present study explored the relationships among transformational leadership, engagement, and task performance. Further, the relationships among variables were compared across two cultures.

#### Design/Methodology

Participants were recruited from both the United States (N=227) and India (N=468) using Amazon's Mechanical Turk population. Participants completed study materials for nominal payments. Participants received a task assignment given with either transformational or transactional imagery and wording, completed a valid engagement measure, and performed the assigned task, all online.

#### Results

No effect for leadership style was found on follower task performance in either sample. However, there was a significant effect for transformational leadership style (as opposed to a transactional style) on worker engagement (with stronger effects in the Indian sample), and a significant effect for worker engagement on performance (with stronger effects in the U.S. sample).

#### Limitations

The study used an artificial task and only manipulated transformational leadership through task directions. There was no long-term relationship between leaders and followers. The cross-cultural comparison was limited to U.S. and Indian samples, rather than a broader range of cultures.



**Research/Practical Implications**

By better understanding how leaders build engagement and influence performance, organizations can take advantage of the influence that leaders have on everyday interactions with their followers. The study illustrates the benefits of affecting follower engagement.

**Originality/Value**

There have been, to date, been no studies that specifically examine the process by which transformational leadership influences engagement, which in turn influences performance at the task level. This is also one of the first cross-cultural studies to examine the work engagement – job performance relationship.



## 8. Sustainable environment and organizations

### Position Papers

#### Nordic Perspectives on Sustainable Workplace Development

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##### State of the Art

The Nordic countries are in many respects considered front-runners in ideas about production development with important distinctions from other countries dating back to the internationally acknowledged socio-technical tradition. The aim of this position paper is to identify and explain key contributions from Nordic working life research.

##### New Perspective/Contribution

The particular social and labor market context of the Nordic countries is the point of departure for the paper. The paper is based on a literature review focused on research on the workers' collective (Lysgaard 1961), on socio-technique systems (Thorsrud & Emery 1970) and on workplace democracy and control (Gardell & Svensson 1981; Karasek & Theorell 1990). These research contributions have been analyzed to identify their unique contributions. Subsequently, the analysis compares the Nordic research with other major working life research traditions such as the labour process debate, occupational medicine and human resource management.

Conclusion and Implications for Research/Practice

The paper points out the importance attributed by Nordic working life research to employees voice and influence – not only in terms of workers resisting exploitations from management or in terms of workers pursuing and individual career – but viewing workers as collectively acting subject sharing ideas and aspirations and influencing workplace development in cooperation with management. The position paper concludes with a discussion of perspectives for future research.

### Single Papers

#### The effect of corporate social responsibility perceptions on employees' intentions to stay. A moderated mediation model

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##### Purpose

Researchers are increasingly interested in exploring the nature and benefits of corporate social responsibility (CSR) activities. Research has revealed that employees who believe that their employer engages in CSR initiatives report higher intentions to stay. The purpose of the present study is to understand the mechanisms that explain this relationship.

##### Design/Methodology

A questionnaire survey was carried out in a large retail organisation in the UK. Overall, 1486 employees were invited to participate in the survey. 528 questionnaires were completed, a response rate of 35.53%

##### Results

The results show that the relationship between CSR perceptions and intentions to stay is mediated by the extent to which individuals perceive that their values match those of their organisation.

Findings also indicate that the relationship between CSR perceptions and person-organisation fit is strengthened by employees' perceptions that the organisation is supportive.

#### Limitations

Limitations of the study include the cross-sectional, self-report nature of the data and the specific organisational context in which the data was collected.

#### Research/Practical Implications

Findings suggest that organisations can reduce voluntary turnover by engaging in CSR activities. Doing so increases the perception that employees' values match those of the organisation, especially when employees feel supported by the employer.

#### Originality/Value

These findings contribute to the small number of studies that illuminate mechanisms that explain why employees respond positively to CSR activities.

### **Corporate social irresponsibility – An obstacle in attracting qualified workforce?**

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#### Purpose

This study aimed at determining the differential effect of corporate social responsibility (CSR) on the organizational attractiveness.

#### Design/Methodology

An experiment manipulated three dimensions of responsibility, i.e. environment, corruption, and diversity management. For each dimension respondents were presented hypothetical job descriptions of either responsible, neutral, or irresponsible organizations and asked to rate the attractiveness of the respective organizations. Moreover, we also measured per-

sonal values with a short scale of the Schwartz value model.

#### Results

As predicted, organizational attractiveness was lower in the irresponsibility conditions for the two dimensions environment and corruption. However, no differences were found between the responsible and the neutral conditions as well as for the diversity management dimension. Likewise, personal values did not show systematic moderating effects on these outcomes.

#### Limitations

The neutral condition described an overall above-average employer. Future research should therefore examine whether CSR influences organizational attractiveness more strongly when other job characteristics are less desirable.

#### Research/Practical Implications

Overall, the extent of assumed responsibility affects organizational attractiveness, thus making it a competitive advantage for enlisting qualified employees. Specifically, organizations that are regarded as being irresponsible are considerably less attractive.

#### Originality/Value

Thus far, the differences between organizations that act responsibly or irresponsibly compared to those that do not show any action concerning their social responsibilities has not been investigated in a study. Additionally, this is the first study to investigate the influence of personal values.

### **Corporate social responsibility: The key to improve work-life balance and effectiveness?**

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### Purpose

In the current economical crisis context, the interest for Corporate Social Responsibility (CSR) as a facilitator of organizations' competitive advantage on one hand, and of their family-friendly policies, on the other hand, has increased (Montero, Araque and Rey, 2009; Urcelay, 2005). But there is only little scientific research on the impact of CSR and policies on employees (such as satisfaction, commitment, identification...). The purpose of this study is to increase scientific knowledge on this topic exploring this relation the relationship between CSR, Work-Life Balance (WLB) and effectiveness.

### Methodology

Participants were 814 employees from two Chilean companies with different levels of development on CSR policies. The IESE Family-Responsible Employer Index (IFREI), the Survey Work-Home Interaction – Nijmegen (SWING -SSC) and the Balanced Scorecard (BSC) were used. Data analysis was based on independent sample t-test, Pearson's correlation and point-biserial correlation.

### Results

Results showed a small but significant relationship between the level of CSR development and individual effectiveness, and between "Negative home-work interaction" index of WLB and individual effectiveness. No statistical differences were found between the level of development on CSR and WLB perceptions.

### Limitations

The main limitation is the number of participating organizations. Future research should include organizations from other sectors, sizes and countries in order to get a deeper insight into the explored relationships.

### Research/Practical Implications

These results imply future efforts to evaluate CSR policies impact, not only on organizational

level but also on individual level, to improve employees' well-being and effectiveness.

### Originality/Value

This research contributes to literature analysing the impact of CSR policies on employees, adding individual indicators to the most common used organizational indicators.

## **Social identity and exchange as mediators of the corporate social responsibility-affective commitment relationship: The moderating role of individual value orientations.**

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### Purpose

Thus far, research on corporate social responsibility (CSR) has not yet systematically investigated the provided theoretical explanations for its relationship with employees' affective commitment (AC). Therefore, this study empirically examined the mediating effects of processes related to social identity and social exchange. Moreover, it also examined the moderating effect of individual values using Schwartz' value model.

### Design/Methodology

Using data from an employee attitude survey (N = 826) at a German retail company, we conducted regression analyses to test moderated mediation models.

### Results

First, results showed a positive overall CSR-AC relationship, controlling for job satisfaction, tenure, and gender. Second, this relationship was mediated both by identification and exchange processes. Third, the strength of the mediation was moderated by individual values.

### Limitations

The study used a cross-sectional design, which does not justify assertions regarding causality. Additionally, the sample consisted of employees from only one company. Future studies, therefore, should replicate these findings in other organizations.

### Research/Practical Implications

This research contributes to our understanding of the CSR-AC relationship by providing empirical support for its underlying mechanisms. In particular, it suggests that social exchange processes should receive more attention in theorizing about effects of CSR on AC in addition to the well-established role of social identity. Furthermore, it suggests that the importance of these processes is moderated by individual value orientations.

### Originality/Value

This is one of the first studies to empirically test the suggested mediators of the little investigated CSR-AC relationship. Furthermore, it is the first to employ a general value model in investigating moderating effects of this relationship.

## **The differential impact of foci versus forms of organizational CSR behaviors on key employee outcomes**

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### Purpose

Organizational CSR activities involve different types of behaviors directed at different stakeholders. Researchers have argued (Rupp, 2011) and to a limited degree shown (Ellemers et al., 2010) that treatment of different stakeholders will have a varied impact on employee outcomes. We explore the impact of socially responsible treatment of different stakeholder groups and disentangle the differential effects

that varied socially responsible actions have on key employee outcomes.

### Design/Methodology

With a head-office sample (n=657) from a multinational bank, questions were asked about treatment toward: employees; customers/clients; community; shareholders, and the environment (5 socially responsible actions for each of the human stakeholder foci and the environment had 3 different questions). Identification/commitment, pride and quit intent were measured as outcomes.

### Results

Unsurprisingly, employee treatment was the strongest predictor of pride, identification/commitment (+) and quit intentions (-). Environmental concern also predicted identification/commitment and pride; the impact of other stakeholder treatment was restricted to the positive relationships between client/customer treatment and pride. When questions were reconfigured to create composites of varied socially responsible actions (regardless of stakeholder foci) building long-term relationships predicted all outcomes; with a consideration of stakeholders' point of view and environmental concerns predicting commitment/ identification and pride.

### Limitations

A cross-sectional survey and a new CSR scale (requiring further validation).

### Research/Practical Implications

Both the foci (stakeholders/environment) and the nature of the socially responsible actions will have a differential impact on employee responses.

### Originality/Value

No other study has sought to separate the impact of differential stakeholder treatment and disentangle the impact of different socially responsible actions/behaviors.



### **Utopian or possible cities? Corporate social responsibility as mainstay for new kind of business growth: A qualitative case study of Strand East**

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#### **Purpose**

Corporate Social Responsibility (CSR) can be considered as a "continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and the society at large" (Von Stamm, 2008). Is this possible? Ikea expand its affairs by investing in Real Estate, with an urban project consisting in the construction of a sustainable district in east London, named Strand East. This paper aims to explore what are the recurrent themes in Strand East presentation made by Ikea, the articles published by newspapers about it, and if there are or less correspondence between what Ikea wants to communicate and what the external environment understand.

#### **Design/Methodology**

To test this relation, using T-LAB software, we carried out a content analysis of the site [www.strandeast.com](http://www.strandeast.com) that consist in Co occurrence, thematic and comparative analysis.

#### **Results**

The analysis show there are some differences between words used by Ikea and those by newspapers.

#### **Limitations**

The newspapers articles analyzed may be selected by Ikea, based on the content, to shows a specific idea of the project.

#### **Research/Practical Implications**

These results shows if the Ikea communication is or not effective.

#### **Originality/Value**

To our knowledge, the study is the first one to analyze this project and its related communicative aspects.

### **Posters**

### **Ethical managers in ethical organisations? The leadership-culture connection among Finnish managers**

*Maiju Johanna Kangas (Univ. of Jyväskylä, FI) [majukangas@gmail.com](mailto:majukangas@gmail.com)*

#### **Purpose**

The aim of this study was to discover, whether the managers' self-evaluations of their ethical leadership style are associated with their assessments of the ethical organisational culture (measured with an eight-dimensional Corporate Ethical Virtues-model; Kaptein, 2008).

#### **Design/Methodology**

This study was based on a questionnaire study with 902 respondents throughout Finland. We conducted a linear regression analysis to examine how ethical leadership was related to ethical organisational culture.

#### **Results**

Managers who appraised their own leadership style as ethical also evaluated the ethical culture of their organisations more positively. The result implies that an ethically behaving leader can develop the culture of his/her organisation towards more ethical practices. The results also showed that differences in evaluating both ethical leadership and culture emerged concerning background variables.

#### **Limitations**

The data collected was based only on self-assessments from one data source, and therefore future studies, e.g., including employee ratings, are needed.

**Research/Practical Implications**

Promoting ethical virtues in organisations can lead to a virtuous circle, which supports both ethical culture and ethical leadership.

**Originality/Value**

This empirical study contributes to the research on ethical leadership by examining it in relation to ethical organisational culture.

### **Shareholders favor stakeholder management? Yes they do – But only as long as it does not hurt!**

*Tanja Schwarzmüller (Technische Univ. Muenchen) [t.schwarzmueller@tum.de](mailto:t.schwarzmueller@tum.de), Prisca Brosi (Technische Univ. Muenchen), Matthias Spörrle (Univ. of Applied Management (UAM)), Isabell M. Welp (Technische Univ. Muenchen)*

**Purpose**

An ongoing discussion circles around the question if organizations should only serve shareholders' interests (Friedman, 1970), with some scientists claiming that organizations are accountable to interests of other stakeholders, e.g., employees or customers (Freeman, 1984). Although database studies indicate a positive relationship between stakeholder management and a company's financial performance (Margolis & Walsh, 2003), very little research has addressed shareholders' attitudes towards stakeholder management via an experimental approach. Apart from profit maximization, to what extent are shareholders influenced by stakeholder-driven altruistic motives? Addressing this question is interesting for corporate governance as it will help organizations to attract shareholders. Therefore, we tested whether and when shareholders are only concerned with profits and whether and when they value stakeholder management.

**Design/Methodology**

Shareholder's attitudes towards shareholder and stakeholder management were tested in

an experimental vignette study (N = 137). Vignettes were based on shareholder-stakeholder conflicts derived from seminal court cases (Adams, Licht, & Sagiv, 2011). We experimentally manipulated CEO decisions (favoring shareholders vs. stakeholders) to examine shareholders' evaluation of these and effects on investment decisions.

**Results**

Shareholders generally favored stakeholder management compared to mere concentration on shareholder value. However, when stakeholder management implied lower dividends for shareholders, participants were less willing to invest in the company and considered stakeholder management less likely to promote company success.

**Limitations**

Results should be replicated using real investment decisions.

**Research/Practical Implications**

Our findings imply that companies can attract shareholders via stakeholder management, as long as shareholders' profits are not jeopardized.

**Originality/Value**

This study adds value by allowing a deeper understanding of shareholders' attitudes towards stakeholder management.

### **A model for guiding customers in developing the optimal future office**

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**Purpose**

Moving to new office premises is often a "once in a lifetime" experience for many companies. The complexity of the process might therefore be overwhelming. In addition to accomplishing the three aspects of sustainabi-

lity (ecological, economic, and social) claimed by the market and authorities, the future office needs to fulfill the organizations' and their employees' present and long-term expectations of an optimal workplace with a good work environment that support the organizations' brand and processes. A decision based on square meters and location is simply not enough in a complex world. A multidisciplinary approach that combines technical, financial, organizational, and individual demands is therefore central when developing future sustainable offices.

#### Design/Methodology

Based on comprehensive literature reviews, we have taken advantage of current research into social sciences, office design and organizational and futures studies, and elaborated a model that links central areas that are important to cover when developing future offices for a variety of customers.

#### Results

Due to the complexity of the model, the results are best presented as a figure.

#### Limitations

The model may have omitted factors that play a role when developing future sustainable offices.

#### Research/Practical Implications

The model is useful both as an external and internal tool. It is valuable when counseling customers through the process of developing their future office and also for employee education.

#### Originality/Value

Applying research based knowledge when developing future sustainable offices strengthens the company's products and trustworthiness in the market.

### Exploring environmentally unfriendly employee behaviors in Europe

*Brenton M Wiernik (Univ. of Minnesota, US) [wiern001@umn.edu](mailto:wiern001@umn.edu), Stephan Dilchert (Baruch College, CUNY), Deniz S. Ones (Univ. of Minnesota, US), Lauren Hill (Univ. of Minnesota, US)*

#### Purpose

Employee behaviors may contribute to or detract from organizations' environmental sustainability goals. We examined environmentally unfriendly work behaviors internationally. The effectiveness of organizational interventions (e.g., environmental policies) depends on how well we understand the behaviors we wish to influence.

#### Design/Methodology

Structured interviews were used to collect descriptions of environmentally unfriendly employee behaviors. The critical incidents technique (see Flanagan, 1954) was used to investigate the taxonomic structure of these behaviors, and their prevalence across categories was analyzed. Overall, 208 individuals from 70 organizations and 86 job families were interviewed. Participants represented 13 countries in 5 European regions: Anglo (United Kingdom, Ireland), Latin Europe (Italy, France), Germanic Europe (Belgium, Germany), Nordic Europe (Norway, Sweden, Denmark, Finland), and Eastern Europe (Bulgaria, Greece, the Czech Republic).

#### Results

1,002 critical incidents of environmentally relevant behaviors were reported. Only 18% of these constituted environmentally unfriendly behaviors (compared to about 25% in the U.S.). These fell into 11 categories such as polluting, wasting resources, using environmentally unfriendly products, harming ecosystems, and failing to conserve. However, the majority of these incidents constituted pollution and wastefulness.

#### Limitations

Future work should explore this research question using primary data to supplement the critical incidents approach.

#### Research/Practical Implications

Our presentation highlights how environmentally unfriendly behaviors fit into a taxonomy of environmental performance. Knowing and understanding the behaviors which our interventions aim to influence will help work psychologists design better HR systems to benefit employees, organizations, and the planet.

#### Originality/Value

This study is the first to explore environmentally unfriendly work behaviors cross-culturally.

### **Managers' prioritisation of corporate social responsibility: Data from an emerging economy such as Peru**

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#### Purpose

The main objective is to contribute to current knowledge in the field of Corporate Social Responsibility (CSR) in an emerging market economy (i.e., Peru) by analyzing how managers' perceptions of stakeholder salience affect the way in which they approach organizational decisions related to CSR initiatives. Furthermore, we aim to further understand whether certain attributes of these groups are most relevant for Peruvian managers in charge of CSR decisions, as well as to identify the motivations that drive their decisions.

#### Design/Methodology

To examine these relationships, we collected information from the CSR managers of the biggest 100 companies that operate in Peru.

#### Results

Results indicate that managers' perceptions of stakeholder salience are positively correlated to the prioritization of CSP actions in all the fields, and also that stakeholder legitimacy, power and urgency predict stakeholder salience. Furthermore, results indicate that the economic motivation is the most important in all the fields of corporate social performance, with the exception of the social and environmental fields.

#### Limitations

It remains to be tested how much our results generalize to other emerging countries and to countries with social and economic inequalities.

#### Research/Practical Implications

Findings indicate that Peruvian managers adopt a markedly instrumental approach of CSR practices that is similar to the one adopted in other economically developed countries.

#### Originality/Value

To our knowledge, the study is the first to analyze managers perceptions about CSR in an emerging economy such as Peru, and such perceptions are key for the actual implementation of CSR practices in economically developed countries.

### **Organizational environmental policies and employee behavior: Comparing European and U.S. samples**

*Brenton M Wiernik (Univ. of Minnesota, US) [wiern001@umn.edu](mailto:wiern001@umn.edu), Stephan Dilchert (Baruch College, CUNY), Deniz S. Ones (Univ. of Minnesota, US)*

#### Purpose

The goal of this study is to contrast the role of the organization in influencing employee environmental behaviors in European versus U.S. settings. Differential relationships across categories of behavior and opportunities for im-

proving environmental performance are discussed.

#### Design/Methodology

Structured interviews were conducted with 600 employees from the U.S. and 13 European countries, resulting in more than 3,000 reports of environmental workplace behaviors. Reports were sorted rationally using an empirically-derived taxonomy of environmental behaviors and subsequently coded for whether they were engaged in voluntarily or required by the organization.

#### Results

Results show that more positive environmental behaviors were required by U.S. organizations compared to European organizations (30% versus 11%), but that negative environmental behaviors were required at equivalent rates. Rates of required behaviors differed dramatically across behavioral domains, with positive behaviors involving innovation and putting environmental interests first being almost completely voluntary.

#### Limitations

While the sample for this study was large, participants were limited to 13 (primarily Western) European countries. Future work should extend these results to other settings.

#### Implications

Virtually none of the reported behaviors involving innovation, encouraging others, or prioritizing the environment were required by employers. If organizations seek to create a competitive advantage by developing new sustainable products and services, there is great opportunity to incorporate these behaviors into their organizational environmental policies and to leverage human resources systems, such as training and selection, to promote their performance.

#### Originality/Value

This study samples a diverse population of employees on the pressing topic of environmental sustainability at work.

### **The “manager of sustainability” in changing labor market: an exploratory study on a new professional profile**

*Emanuela Ingusci (Univ. of Salento, Lecce IT) [emanuela.ingusci@unisalento.it](mailto:emanuela.ingusci@unisalento.it), Michele Dassisti (Politecnico of Bari, IT), Maria Velia Artigas (Univ. of Mar Del Plata, AR)*

#### Purpose

Our society is undergoing a transition process from the mechanistic paradigm of the past to the ecological paradigm involving a new systemic perspective: sustainability approach. Sustainable development is a new challenge in the years to come (WCED, 1987) in particular for young generations. The aim of the study is to explore, at first step, the emerging figure of the “manager of sustainability”, considering new skills and attitudes oriented to environmental sustainability.

#### Design/Methodology

An ad-hoc questionnaire consisting of a managerial skills scale, has been designed to this aim, as an Italian adapted version of managerial skills inventory (Spencer and Spencer, 2000). The survey was carried out on a sample of 350 college students, from different academic areas (engineering, human sciences, economics) and with different ages.

#### Results

The manager of sustainability is thought to have skills such as pro-activity, customer orientation, as well as strong commitment toward organizational roles, teamwork and cooperation.

#### Limitations

This outcome picture is still limited, since further efforts can be devoted to the generalizability of the survey, by including contextual

variables related to the geographical environment.

#### Research/Practical Implications

Future steps of the research will explore the social representation of professional skills in managers involved in sustainable development. Moreover, the point of view of the enterprises involved in the sustainable concerns will be considered. Originality/Value This work proposes a new perspective, bottom up, trying to provide an emerging picture from the mind of young students, the managers of the future: their opinion can be considered important because they will make up the future picture of sustainable world.



# 9. Organizational change and development

## Symposia

### Organizational Change in European Policing

Session Chairs: *Gabriele Jacobs* (Rotterdam School of Management, Erasmus Univ.) [gjacobs@rsm.nl](mailto:gjacobs@rsm.nl), *Kate Horton* (Rotterdam School of Management, Erasmus Univ.) [khorton@rsm.nl](mailto:khorton@rsm.nl), *P.Saskia Bayerl* (Rotterdam School of Management, Erasmus Univ.) [pbayerl@rsm.nl](mailto:pbayerl@rsm.nl)

Organizational change is a risky endeavor. Most change initiatives fall short on their goals and produce high opportunity costs, which at times outweigh the content benefits of organizational change. In this symposium we bring together European scientists and practitioners from different perspectives who reflect on change in policing organizations. All presentations stem from an EU-project ([www.composite-project.eu](http://www.composite-project.eu)) which focuses on organizational change in policing in ten European countries. European policing is an interesting case to consider for organizational research. Within the European arena it becomes clear that structures and identities of organizations who are supposed to deliver the same product, namely safety and security, are strongly shaped by their national context. Starting from an organizational identity perspective, we link strategic approaches (i.e. the societal positioning of police forces) and major technological developments (i.e. the acceptance of social media) with insights from organizational behavior research, such as knowledge sharing (i.e. the cultural and hierarchical determinants), work procedures (i.e.

effects on professional identity and performance) and leadership (i.e. leadership enablers and barriers to successful change).

We feel that the complex topic of change deserves a multi-method, multi-disciplinary and multi-cultural approach and is thus best suited to a scientist-practitioner symposium. Our symposium aims to showcase that organizational change is more risky and multifaceted than change initiators typically assume. We stress that the external environment and the internal dynamics of organizations co-determine the meaning and effectiveness of managerial practices. This implies that “cure-all” recipes to organizational change are destined to fail.

### *Presentations of the Symposium*

#### **The societal positioning of European police forces: Police accountability and identity**

*Dominique Lapprand* (Security governance and security systems consultant, FR) [dominique.lapprand@wanadoo.fr](mailto:dominique.lapprand@wanadoo.fr)

Police organizations enforce the law, deliver security and mitigate conflicts, and therefore play a key role in any society. An environmental and strategic analysis of current policing trends is needed to understand topics and priorities of organizational change in this sector.

Police are simultaneously an institution, an organization and a profession. The interactions between these three dimensions define both the individual attitude of the police officer and the organizational relationship of the police with the citizen. Based on decades of experience as a police officer and expertise at the European tactical and strategic policing level, I identify two major current features in policing organizations.

Police organizations and consequently police identity are defined by accountability. This is especially true at the European level with the EU aiming to build a space of Justice, Liberty and Security and the Council of Europe actively protecting the rights of the citizen. There are however huge discrepancies among EU member states about how the concept of accountability is understood and used and consequently about police identity. Furthermore in a post 9/11 world, the redefinition of policing priorities, new managerial practices and the Europeanization of policing impact the police identity. Analysing these trends with respect to police accountability and identity helps us to understand how the police's attitudes towards society, both at an individual and an organizational level, will change in the future.

### The acceptance of social media

Jean Brunet (Capgemini Group, FR)  
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In this presentation we will uncover differences in the adaptation of social media by European police forces in ten countries. A goal of our research is to understand and improve technology adaptation and organizational change practices for the specific context of policing. In order to create an overall picture of the phenomena of social media adaptation in European police forces, we combine a number of methods. Our findings stem from a trend study in which we interviewed IT specialists from the police and industry, a series of focus groups in workshops on the adaptation of social media, a meta review of societal social media adaptation statistics in the ten participating countries and a series of interviews in which we confronted police officers with potential social media uses. We show that social media adaptation of European police forces, while relatively similar in society,

differs greatly in the participating countries and link this difference to the specific role and culture of the forces. While our research only includes data from a limited number of countries and forces, we understand it to be an important next step in providing academic understanding of the interplay of technology adaptation and organizational change, as well as practical knowledge on good practice that can support police forces in social media adaptation. Given that social media were introduced only very recently into policing practice, there exist, to our best knowledge, no comparable studies, to this day.

### Knowledge sharing: The cultural and hierarchical determinants

Lucia Rațiu (Babeș-Bolyai Univ., RO)  
[luciaratiu@psychology.ro](mailto:luciaratiu@psychology.ro), Claudia Rus (Babeș-Bolyai Univ., RO), Gabriel Vonaș (Babeș-Bolyai Univ., RO), Adriana Băban (Babeș-Bolyai Univ., RO)

Although knowledge sharing is a crucial process of effective police work, the literature on this topic is scarce. Thus, this study investigated the cultural and hierarchical determinants of the overall effectiveness of internal knowledge sharing in police organizations. Cultural determinants were examined in terms of employees' involvement in change management, organizational flexibility (openness and support to develop new ideas, readiness for change), and specific actions to promote knowledge sharing. Hierarchical determinants were considered as the general line and senior management's encouragement to share knowledge. Participants were 88 police officers from one Romanian police force. Based on a cross-sectional design, data were collected using the items from the Police Knowledge Sharing Diagnostic Tool – Diagnostic Instrument (POLKS-DI; the Institute of Work Psychology, University of Sheffield, 2012).

The results indicated that senior management's encouragement positively predicted

the overall effectiveness of internal knowledge sharing ( $\beta = .47$ ,  $p < .01$ ). Surprisingly, general encouragement to share knowledge negatively predicted the overall effectiveness of internal knowledge sharing ( $\beta = -.30$ ,  $p < .05$ ). The other cultural and hierarchical variables did not significantly predict the overall effectiveness of internal knowledge sharing.

Considering the cross-sectional design, causal relations between variables cannot be inferred. However, these results have implications for the understanding of internal knowledge sharing in police organizations by examining the several cultural and hierarchical determinants of internal knowledge sharing effectiveness. Also, these results provided additional empirical information regarding the factors essential for effective management of internal knowledge sharing in police organizations.

### **Taylorising investigative police work: The effects on professional identity and performance**

*Stefanie Giljohann (Fachhochschule der Polizei des Landes Brandenburg, DE) [stefanie.giljohann@fhpolbb.de](mailto:stefanie.giljohann@fhpolbb.de), Nathalie Hirschmann (Fachhochschule der Polizei des Landes Brandenburg, DE), Mario Gruschinske (Fachhochschule der Polizei des Landes Brandenburg, DE), Susanne Stein-Müller (Fachhochschule der Polizei des Landes Brandenburg, DE)*

European police departments are increasingly called to rationalize their services in response to widespread cuts to public funding. The purpose of this research was to evaluate the effectiveness of a change procedure implemented within a Brandenburg police department in Germany. Specifically, we used a case study approach (Yin, 2009) to analyse the pilot project ZENTRAB (German abbreviation for central complaints processing) which was implemented in a criminal investigation unit. The

ZENTRAB project represents a Tayloristic working model with the aim of reducing work demands on police officers by allowing their colleagues to process cases in a very simplified and standardised way, with little need of investigative effort from criminal investigators. We investigated the efficiency of this project, basing our analysis on internal statistics, as well as interviews. Our findings indicated that ZENTRAB had a positive impact on both departmental performance and employee well-being; increasing case completion rates and employees' satisfaction, while reducing sickness and absenteeism. However we also highlight the limitations of the project, including its potential to threaten the professional identities of officers and to hamper the completion of more complex investigative cases. We discuss the wider implications of our findings; suggesting that the success of Tayloristic work models are dependent on both the nature of the tasks undertaken and the identities of those employees completing them. Given an increasing need to economize on public spending, we believe these findings have important implications for the police in particular and the management field more generally.

### **Enablers and barriers to successful change**

*Kate Horton (RSM, Erasmus Univ., NL) [khorton@rsm.nl](mailto:khorton@rsm.nl), P.Saskia Bayerl (RSM, Erasmus Univ., NL), Gabriele Jacobs (RSM, Erasmus Univ., NL)*

Change is notoriously disruptive to organizations, causing employee resistance, mistrust and threat that are often highly detrimental to organizational outcomes. At a time when the complexity and scale of criminal activity grows ever more severe, police organizations are increasingly subject to change and uncertainty, as the effects of the global financial crisis are felt across Europe. In this presentation, we will examine the underlying factors that shape successful and unsuccessful change projects in

European police organizations. Basing our paper on 150 interviews conducted with police officers in 10 countries (Belgium, Czech Republic, France, Germany, Italy, Netherlands, Republic of Macedonia, Spain, Romania and the United Kingdom), we highlight police officers' perceptions regarding the barriers and facilitators of successful change. Specifically, our interviews draw upon repertory grid and critical incident techniques to examine the underlying leadership, structural, communicational and behavioral factors that shape change outcomes. In addition, we draw upon this broad multi-national sample, to highlight common and country-specific determinants of change success, reflecting on the identity and cultural factors that influence the acceptance of change projects in different contexts and forces. This research has certain limitations, providing a single snapshot of change processes in ten European countries and examining the subjective experiences of officers rather than any objective sources of data. However, our findings also have important and timely implications for the management of change, enhancing our understanding of the key factors that facilitate successful change implementation, in this most turbulent of times for European policing.

## **Organizational Health Intervention Research – Model, Indicators and Practical Approach to Building Capacities for Positive Health in Organizations**

Session Chair: *Gregor James Jenny (Univ. of Zürich)*  
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### **State of the Art**

Much evidence has been accumulated on adverse psychosocial working conditions and health outcomes, calling for intervention programs. To be effective, such programs target

both individual and organizational levels, advancing from single-measure interventions to dynamic processes of health-oriented organizational change. Researchers have addressed this challenge together with practitioners, developing models of healthy organizations, approaches to health-oriented change and research methods fit for this purpose.

### **New Perspectives/Contributions**

Researchers and practitioners will present their model of a healthy organization, corresponding indicators, their approach to health-oriented organizational change and the ways they research such interventions:

- Speak and act together: Conceptualizing health capacities and positive health outcomes as mutual targets of stakeholders in organizations.
- Work-related Sense of Coherence as mediator of the relationship between working conditions and health outcomes.
- Stability-change model of job demands and resources – exploring the amount of variance over time and discussing stabilizing factors.
- Transforming a model-based approach to change into real-life action: considerations from practitioners view.
- Structuring intervention and evaluation research within a research model for organizational health development.

### **Research/Practical Implications**

Understanding health-oriented change in organizations is a long-term endeavour demanding cooperation of researchers and practitioners. Basing research and practical activities on a mutual mind-map and a comprehensive set of indicators, researchers are better able to analyse the process and effectiveness of such field-projects, while practitioners can easier

transfer scientific knowledge into companies they are working with.

### ***Presentations of the Symposium***

#### **Speak and act together: Conceptualizing health capacities and positive health outcomes as mutual targets of stakeholders in organizations**

*Georg Friedrich Bauer (Univ. of Zürich) [gfbauer@ifspm.uzh.ch](mailto:gfbauer@ifspm.uzh.ch), Gregor James Jenny (Univ. of Zürich)*

##### State of the Art

A literature review showed that currently heterogeneous conceptualizations and research models of organizational health (OH) exist. Still, key elements of a future OH model can be identified.

##### New Perspectives/Contributions

Based on this review, first OH development was defined as „both the ongoing reproduction and the targeted improvement of health in organizations as social systems, based on the interaction of individual and organizational capacities” (Bauer & Jenny, 2012). Second, building on a generic health development model and a systemic management model, an own OH development model was developed. It shows how job demands and job resources as well as related positive and negative health outcomes result from a continuous interaction between personal capacities (competence, motivation, identity) and organizational capacities (structure, strategy, culture) – which in turn are influenced by the larger environment of the organization and its employees. Finally, it shows how continuous cycles of optimization and renewal in organizations can build on and improve ongoing OH development.

##### Research/Practical Implications

This model is useful as a common group-action theory for planning, implementing and scientifically evaluating organizational health

interventions. It reminds that OH primarily results from natural, pre-existing structures and processes in organizations and that targeted interventions need to consider and strengthen these.

##### Originality/Value

The OH development model bridges the research-practice gap. It allows to study both positive and negative health outcomes simultaneously – as well as potentially differential impacts on physical, mental and social health. Finally, it points to building capacities in organizations for self-sustaining OH development.

#### **Work-related sense of coherence as a mediator of the relationship between working conditions and health outcomes**

*Katharina Vogt (ETH Zürich) [kvogt@ethz.ch](mailto:kvogt@ethz.ch), Gregor James Jenny (Univ. of Zürich), Alice Inauen Lehner (ETH Zürich), Désirée Füllemann (ETH Zürich), Georg Friedrich Bauer (Univ. of Zürich)*

##### Purpose

Work-related Sense of Coherence (Work-SoC) describes the perceived comprehensibility, manageability, and meaningfulness of an individual's working environment. The aim of this study is to investigate whether Work-SoC acts as a mediator of the relationship between working conditions and health outcomes.

##### Design/Methodology

Multiple regression analysis is performed on cross-sectional data collected in eight medium to large Swiss companies (n = 3400). The survey included a nine-item measure of Work-SoC, as well as scales measuring job resources (e.g. task identity, job control, social support), job demands (e.g. time pressure, work interruption, qualitative overload), and health outcomes (work engagement and exhaustion).

##### Results

Results indicate that Work-SoC acts as a partial mediator of the relationship between job



resources and work engagement and of the relationship between job demands and exhaustion.

#### Limitations

As the study uses cross-sectional data only, no conclusions regarding causal processes can be drawn. Furthermore, the results are based on self-reported questionnaire data only.

#### Research/Practical Implications

Work-SoC could be used as a practical screening instrument to detect the need for further investigation and to derive interventions enhancing the health-promoting quality of working conditions.

#### Originality/Value

This contribution emphasizes a positive perspective in occupational health psychology by applying the concept of Sense of Coherence to the work context. Considering the size and heterogeneity of the companies involved in the study sample, results are of high external validity and allow for well-justified conclusions.

### **Stability-change model of job characteristics and well-being outcomes – Exploring the amount of variance over time and discussing stabilizing factors**

*Rebecca Brauchli (Univ. of Zürich) [rebecca.brauchli@ifspm.uzh.ch](mailto:rebecca.brauchli@ifspm.uzh.ch), Wilmar Schaufeli (Utrecht Univ.), Gregor James Jenny (Univ. of Zürich), Désirée Füllemann (ETH Zürich), Georg Friedrich Bauer (Univ. of Zürich)*

#### Purpose

Based on the JD-R-Model this study aims at estimating the proportion of variance of job characteristics and wellbeing outcomes which can be attributed to stable and changing factors. Thereby we provide a basic model for the further investigation of the determinants of these stable and changing components.

#### Design/Methodology

These issues were addressed using longitudinal data from 3 waves with a 1-year time interval (N=1,038).

#### Results

Results from structural equation modeling indicate that – compared to the negative aspects of the working environment (i.e., job demands and burnout) – positive aspects (i.e., job resources and work engagement) are determined to a higher degree by stable factors.

#### Limitations

Due to a scarcity of adequate measures we could not determine the factors of stability (such as stable organizational aspects) and change (such as changing working conditions),

#### Implications

This study provides a model to determine factors associated with stable components of job characteristics on the one hand and with changing components on the other. In doing so, it is feasible to design interventions that target changing components and might therefore be more successful.

#### Originality/value

This study follows a new approach by applying a longitudinal stability and change model that is based on the idea of a dynamic equilibrium. The disentangling of stability and change in job characteristics and wellbeing outcomes not only allows to find ideal starting points of intervention programs but also to better predict their success depending on the degree of the stability of the outcomes they focus on.

### **Transforming a model-based approach to change into real-life organizational action: considerations from practitioners view**

*Anita Blum-Rüegg (Univ. of Zürich) [anita.blum-rueegg@ifspm.uzh.ch](mailto:anita.blum-rueegg@ifspm.uzh.ch), Alice Inauen Lehner (ETH Zürich)*



### Purpose

This contribution explores the strengths and weaknesses of a model-based approach to health-oriented change in organizations from a practitioners view.

### Design/Methodology

This approach to change builds on a model of healthy organizations which is implemented in each step of the change process. Such, management, team leaders and employees incorporate the model for analyzing their working situation and develop measures to reduce job demands and strengthen resources, ultimately building health-related capacities for sustainable optimization.

### Results

This model-based capacity building approach has been preliminarily tested in the field and will now be applied in a systematic intervention project in multiple companies. Preliminary experiences show it has strengths in introducing new perspectives, visualizing the interplay of workers, their work, the organization and health, but also its weaknesses in terms of abstractness and complexity.

### Limitations

Systematic testing in the field is limited to qualitative data, as such dynamic change processes can't be standardized and compared quantitatively across companies.

### Research/Practical Implications

Practitioners preliminary experience with this approach suggest modifications in vocabulary and presentation of the model, in order to connect better to the targeted system.

### Originality/Value

Health-oriented capacity building based on a model of healthy organizations seems to be a promising step towards sustainable health development in organizations.

## **Structuring intervention and evaluation research within a research model for organizational health development**

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### Purpose

This contribution presents the lessons learned of the process and effectiveness evaluation of a stress management intervention (SMI) in eight companies.

### Design/Methodology

The study builds on a framework that structures the results with respect to both individual and organizational level targets, job demands and resources as well as negative and positive health outcomes, using qualitative and quantitative methods. In place of pre-assigned control and intervention groups, it applies an adapted research design "fit for purpose" in the context of a field study accounting for and building on the dynamics of organizational change, retrospectively assigning study participants into comparison groups.

### Results

The project had an impact on individual and organizational factors as well as on job demands and resources which are strongly related to health and productivity outcomes. The study also showed that participation in such projects does not suffice to achieve impact, but that individual motivation and team dynamics must be researched to fully understand how change occurs.

### Limitations

In terms of traditional designs, this study could not provide pre-assigned intervention and control groups for quantitative longitudinal analysis.

**Research/Practical Implications**

This study aims to strengthen adaptive study designs and measures which facilitate the integration of process evaluation results into overall effectiveness evaluation, guided by an framework for reducing complexity.

**Originality/Value**

This study applied multiple methods and a strong framework to capture and analyze both process and effects of the project, yielding results relating to the dynamics of SMI in the field which can be used for future project design.

**Invited Debate**

## **Practitioner-Scientist Debate on Innovation in Organizations**

Session Chair: *Wolfgang Scholl (Humboldt Univ., Berlin)* [schollwo@cms.hu-berlin.de](mailto:schollwo@cms.hu-berlin.de)

**Panelists:**

*Michael Frese (Leuphana Univ. of Lüneburg, DE)* [frese@leuphana.de](mailto:frese@leuphana.de), *Tom Sommerlatte (Osiris MIC GmbH)*

**Purpose**

Empirical research in psychology proceeds in small steps through tiny pieces of broad areas of public interest; so, it is usually very difficult for practitioners to gain an unbiased overview and useful recommendations for their daily work from scientific research. This state of affairs holds especially true for the field of innovation because innovations encompass many different aspects on all human system levels and they are researched in diverse disciplines where the bulk of publications on innovation does not come from psychology. From their own overview over the rich scientific and/or practitioner-oriented literature about innovation, the debaters try to distill and discuss the most important insights in the

Practitioner-Scientist Debate “Innovation in Organizations”.

**Controversial Perspectives**

Michael Frese, experienced researcher, holds that “any first thought on innovation is wrong” and “all formulas that are suggested to practice are wrong”. He recommends a dialectical view on all facets of innovation, proceeding from thesis to antithesis and synthesis which is but a new thesis in the next round of deliberations and practical measures. Tom Sommerlatte, experienced practitioner, holds that interaction and communication with the intended beneficiaries of innovation, the clients, is most important in order to recognize the relevant innovation potential. The problem is that the clients themselves often do not really know their own needs and utilities. So, a maieutic dialogue with potential clients is recommended throughout the innovation process. Wolfgang Scholl, primarily facilitator in this dialogue, holds that constructive conflict management is most important because it promotes relevant knowledge gains as well as the coordination capability, both being mediators to successful innovations.

**Implications for Research/Practice**

The research situation seems to ask for more integrative theory building across the relevant disciplines. One way to support this could be the inclusion of more innovation researchers into the EAWOP Innovation Group which had its first meeting on November 23, 2012, in Berlin, and will meet again in Münster at the EAWOP congress. Another way would be an enlargement of this group with interested researchers from other disciplines. For bridging the research-practice gap, more joint projects with careful evaluations would be helpful on the one side, and an interchange of scientists with consultants on the other. The concrete implications for the practice of innovation will be one of the discussion points in this debate.

## Position Papers

### Knowledge Creation for Whom?

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#### State of the Art

Knowledge management has become a fad-dish answer to a variety of organizational problems (e.g. losing competitive advantage, lack of dynamic capability, poor human resources management, etc.) since the introduction of the resource-based and knowledge-based theories of organizations (Barney, 1991; Grant, 1996; Spender, 1996). Specifically, the creation and sharing of knowledge by organizational members are seen to be vital to construct an effective learning organization to cope with the modern fast-changing technological and economic environment (Alvesson & Kärreman, 2001; Nonaka & Takeuchi, 1995). Past research has characterized the appropriate work environment (e.g. the presence of trust, the presence of shared context and language, effective team composition, etc.) that can be conducive to workers' knowledge creation (Egbu, 2006; Peltokorpi, Nonaka, & Kodama, 2007). However, relatively little attention has been paid to the inner psychological tension of organizational members toward knowledge creation. This inner psychological tension toward knowledge creation stems from the knowledge appropriability problem as postulated by Coff (1999) and Mueller and Dyerson (1999) and other colleagues (Bowman & Swart, 2007; Kamoche, 2006; Kamoche & Mueller, 1998).

Hence, amidst the rigorous research on how to enhance knowledge creation of workers, a few fundamental questions are yet to be addressed: Is knowledge creation beneficial to the workers, the creators, per se or to their employers, the organization? Are there times that workers are reluctant to create

knowledge for the company because they cannot perceive their benefits? The extant literature lacks theoretical analyses and empirical studies on the psychological struggle of workers on knowledge creation. The current paper aims to advocate investigations on such significant aspect of modern work psychology – workers' psychological tension toward knowledge creation.

#### New Perspective/Contribution

Knowledge appropriation concern is proposed to be the critical theoretical perspective to analyze modern workers' psychological tension towards knowledge creation. Knowledge appropriation refers to people's ability to secure the intellectual property right of their knowledge and retain the benefits from utilizing their knowledge (Kamoche, 2006; Kamoche & Mueller, 1998). The problem of knowledge appropriation is mainly derived from the ambiguous boundary of knowledge assets, in other words, the ambiguous possession right of knowledge. Knowledge is different from traditional, tangible production assets whose possession and transfer can be clearly defined. Knowledge as a production factor is distinguishingly characterized by its non-depreciation and value-increasing nature when it is continuously used and shared.

Most organizations strive to capture the knowledge of their workers and turn them into organizational assets through knowledge management practices so as to increase their values and competitive advantage (Kamoche, 2006; Mueller & Dyerson, 1999). When this occurs, it means that knowledge created by individuals are ultimately retained, owned and appropriated by the organization instead of by the individuals per se. This is where the psychological tension of workers appears: Whom do I create knowledge for? Eventually who will be able to capture the value of the created knowledge? In addition to the appropriation problem, there are other concerns like oppor-

tunistic behaviors of co-workers or team members, heavy investment of time and effort, uncertain outcome of the creation, etc (Husted & Michailova, 2002; Wilkesmann, Wilkesmann, & Virgillito, 2009).

Unfortunately, these questions regarding knowledge ownership and appropriability and workers' uncertainty about knowledge creation are often undermined in past studies. Such limitation makes Bowman and Swart (2007) to call for exploration of strategies employed by both employees and employers to claim ownerships of embedded capital, or intellectual properties, in organizations. Similarly, Felin and Hesterly (2007) call for more investigations of appropriation problems at the individual level and the implications of individual mobility on organization's appropriation strategy. In sum, it is argued that the ownership of knowledge upon its creation is an inevitable concern of both the employees and the organization because it determines who would be able to capture the generated rents from the knowledge. Cabrera and Cabrera's (2002) analysis of worker's knowledge sharing dilemma and Kamoche's (2006) examination of knowledge appropriation tensions represent the pioneering effort in researching workers' psychological tensions toward knowledge sharing. However, such effort on workers' knowledge creation is largely absent.

#### Conclusion and Implications for Research/Practice

Therefore, given the simultaneous forces of creating and contributing knowledge to reveal an individual's value and a bunch of concerns regarding the deserved returns of the creation effort, more theoretical and empirical work are required to unfold the dynamic impacts of opposing forces on the psychology of workers toward knowledge creation. Specific questions that need to be addressed include but not limited to:

- What are the perceived costs and benefits of workers on knowledge creation?
- Who should bear and capture those costs and benefits respectively?
- To what extent the concern of knowledge appropriation affect workers devotion and contribution on their job?
- How do workers perceive the issue of knowledge ownership?
- How many kinds of psychological tensions do workers experience during the whole process of knowledge creation?
- What are the implications of these psychological tensions on workers' behavior and performance?
- How do the tensions related to knowledge creation differ from other work-related psychological tensions?
- Do workers feel their employers are generally appropriating their intellectual capital?
- How can workers assure their appropriability on the knowledge they created?

Both qualitative and quantitative research designs are encouraged to answer the above questions. By investigating workers' knowledge creation via a knowledge appropriation perspective, it is expected to contribute to theoretical developments regarding the work psychology of modern knowledge workers, whose management is often argued to be different from that of the traditional manufacturing or service workers (Drucker, 2002). Moreover, such research focus will contribute to the areas of individual creativity and organizational learning as it is able to provide valuable insights on unpacking workers' psychological hindrances on knowledge creation. Finally, the proposed research will also advance our knowledge on the arena of knowledge appro-

priation by deeply examining the perceived costs, benefits and ownership concerns of knowledge workers.

### **Civility, Respect, and Engagement in the Workplace (CREW): An Intervention into Organizational Culture**

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#### **State of the Art**

Much has been written about the negative impact of incivility and its costs to organizations, but less is known about how to counteract it by establishing a civil workplace climate. We believe that promoting civility on the job works best at the organizational level, because instances of civility and incivility reflect a broad interactive process that happens within a specific context (e.g. workgroup), not single static events between separate people (Pearson et al, 2005; Osatuke, Moore, Ward, Dyrenforth, & Belton, 2009). CREW is an intervention promoting civil workplace climate. We discuss its conceptual model and how it informs the change process. The intervention description and evidence for successful outcomes are presented elsewhere (Osatuke et al., 2009; Leiter et al, 2011).

#### **New Perspective/Contribution**

Civility refers to behaviors that express interpersonally valuing and being valued by others, and are based on a consciously cultivated awareness of one's interpersonal impact. A CREW intervention facilitates within-group collective process of reflecting upon, identifying, promoting, and expanding the aspects of on-the-job interactions that result in all members feeling appreciated at their workplace. Since this process, by definition, is socially mediated and context-dependent, it is flexibly adapted to given groups, rather than standardized independently of participants and dynamics. Intervention success depends

upon keeping close to employees' experience of their workplace, because the treatment philosophy incorporates responsiveness to client needs.

Given how CREW works (standardization not only impossible but also undesirable), it presents unique challenges to interventionists and researchers. The intentionally cultivated process variability precludes examining which process elements directly facilitate which outcomes. Participants' perceptions become an important mediator. Process-outcome studies should include the participants' meaning-making in the change models, to reflect the socially mediated mechanism of change.

Organizational support for civility constitutes the first element of the CREW model. When support is present, employees perceive their organization as consistently enforcing civil workplace behaviors (e.g., through policies, practices). This is expected to make employees feel respected (2nd element of the model) which, in turn, is expected to empower employee actions, resulting in greater engagement (3rd element) into collaborative efforts toward the organization's shared goals.

The overarching purpose of CREW is to highlight the importance of civility on the job. When an intervention starts, this translates into conversations about how workplace civility helps the organizational goals (i.e. business case for civility in this unit). Participants discuss what defines civility in their unit, identify any barriers to it, and establish a shared commitment to higher standards (norms) for acceptable workplace behaviors. As CREW progresses, groups focus on maintaining awareness of their interpersonal climate—e.g., by recognizing behaviors that improve civility and celebrating positive outcomes.

The mechanism of change in CREW is that, for the intervention period, organizations commit

to giving time, attention, and support to regular workgroup-level conversations about civility. These dialogues bring civility-related aspects of organizational life to the collective awareness. Considering them together, in the shared interpersonal context, provides participants regular opportunities for reflection and better understanding (intermediate outcomes of the CREW process) and support the subsequent work of identifying specific issues and devising actions.

Of note, while the intervention promotes civility, the content of workplace behaviors considered civil is not part of the CREW model; it is defined locally, on a case-per-case basis. This distinction, loosely similar to differentiating a construct from its operationalization in experimental research (e.g. “positive reinforcement” is a broad concept; “offering a candy bar” is a specific way to operationalize it), is crucial for understanding the CREW model. As civility and incivility are unique to particular situations (Pearson et al, 2005), civil behaviors are culturally specific to each workplace.

CREW is thus a customized, initiative-based approach, based on participants’ experience of the workgroup process, allowing each group to define its interpersonal norms, focus areas (contents), and intervention processes (actions to promote workplace civility). CREW operational plans emphasize adaptability of intervention designs, not only across groups, but also across time. Participants redefine the intervention as needed, since their workplace will expectedly change as a result of the intervention itself.

The importance that we attribute to contextually defined aspects of change parallels insights from empirical research in fields other than OD, also interested in bettering people’s interactional processes through applying interpersonally based interventions. For example, aspects of relationship between psycho-

therapy participants (alliance, empathy) have been extensively documented to make as much as, or more, difference for outcome than the specific treatments used (Norcross, 2002; Wampold, 2001; Ahn & Wampold, 2001). Research in these fields also highlighted clients’ own contribution to change process and the importance of studying how clients actively transform what they receive for their own productive use.

CREW is a change in intervention paradigm compared to more structured, content-expert driven organizational change approaches. The scope of innovation CREW introduced in the organizational consulting is comparable to the impact of person-centered approaches which, in the 1950s, redefined the basic assumptions within counseling psychology, psychotherapy, individual and group coaching about how psychological treatment works. The client-centered CREW model steps away from a prescriptive stance, with a central role in change reserved for an expert interventionist diagnosing and addressing problems one by one. Instead of single workplace malfunctions, CREW focuses on the interactional climate as the common source of specific problems at the workplace. Instead of instructing clients in correct meanings or behaviors suggested by an expert outsider, CREW pushes them to consider what systematically shapes their ways of relating to each other, recognize better options, and begin practicing these while collectively monitoring this process and evaluating its daily outcomes. This approach transfers expertise and power from the interventionist to the client, consistent with the notion of empowerment in CREW.

#### Conclusion and Implications for Research/Practice

CREW is the first workplace intervention of its scope to systematically address interpersonal climate, and one of the rare organizational interventions with empirical evidence of suc-



cess. This approach to organizational change deserves a detailed explanation. Examining how CREW works can inform researchers' conceptual thinking and influence strategic choices of managers interested in improving their workplace.

### **A Multi-Dimensional, Resource-Based Model of Individual Adaptability**

*Karen van Dam (Open Univ., NL)  
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#### **State of the Art**

The fast pace of environmental and organisational change implies heightened pressure on employees to be increasingly adaptable, versatile, and tolerant of uncertainty in order to perform effectively in new or changing work situations. Individuals' potential to successfully adjust to a changing work context is generally referred to as "individual adaptability". Individual adaptability is widely acknowledged as a key quality for today's employee, and has even been proposed as a third type of job performance in addition to task and contextual performance

Despite the importance of adaptability at work, there is still limited integrated research on this topic. Only recently, researchers have started to address adaptability and adaptive behaviours, focusing on, for instance, adaptive performance, task adaptivity and career adaptability. Although research on adaptability is scarce, previous research has also investigated employee adjustment to changing, uncertain, or new work situations, yet without directly referring to the concept of individual adaptability. Examples are research on organisational and continuous change, employability, work-role transitions, and work stress.

Although these different fields and approaches are valuable, their variety and different foci can also be considered a potential limitation toward developing a general model of individ-

ual adaptability. As such, the concept of individual adaptability is still poorly understood.

#### **New perspective / contribution**

The primary objective of this presentation is to discuss and define the concept of individual adaptability, applying notions from evolutionary biology to organisational psychology, and questioning the nature of adaptability. Next, a general model for individual adaptability is presented that integrates different frameworks and findings, and contains three components: cognitive, affective and behavioural adaptability. In line with this distinction, I will put forward several cognitive, affective and behavioural psychological resources that underly these components, together with research findings.

#### **Conclusion and implications for research**

The model and related research findings indicate that effective adaptation can be obtained when employees are aware, open, proactive, regulate themselves and their emotions, and adjust both themselves and the environment/situation in order to obtain a win-win situation. Finally, some theoretical and empirical challenges will be provided to be addressed in the future.

### **Monitoring Organizational Rhythmicity; Strengthening of Involvement of Employees and Managers in Change Processes**

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#### **State of the Art**

The success of organizational change has been related to the 'model of organizational rhythmicity'. The degree of success of a change depends on the involvement of the employees and managers. The involvement of employees and managers with change processes can be strengthened with the new and innovative

'model of organizational rhythmicity' (by using an analysis of the rhythmic characteristics with the Questionnaire Organizational Rhythmicity and based on that, the formulation of suggestions for improvement). This involvement is of great importance. The involvement obtained by filling in the rhythmic characteristics (being the underlying mechanisms of change in the organization, such as working with a schedule, delays, moments of communication) is a new factor for successful change. The importance of organizational rhythmicity for organizational change processes is showed by describing the relationship between rhythmic characteristics and successful change.

The aim of the study 'Monitoring organizational rhythmicity' was to explore the importance of organizational rhythmicity for organizational change processes. An organizational change was described for ten organizations and analysed with the rhythmic characteristics. The study was conducted within ten organizations from various industries: business, government and non-profit sectors. Through this analysis the areas for improvement were detected: where should an organization stimulate the energy and vitality by adjusting the rhythmic parameters.

By interviews with representatives of ten organizations an organizational change was selected. For 950 participants (N=950) a 0-measurement and a final measurement by a digital questionnaire were developed and used. With the results of the measurements interventions were explored for the ten cases of organizational change. The measurements of the rhythmic characteristics before and after a change process (baseline assessment and final measurement) show that the rhythmic parameters react sensitively to specific organizational change processes. This allows the individual outcomes for rhythmic characteristics to be captured relatively uniquely,

provided that a sufficient number of respondents participate in a measurement.

#### New Perspective/Contribution

Organizational rhythmicity is a new factor to successfully change organizations. In every change process there are two rhythms: the rhythmicity of the organization and the rhythmicity of the change process. Examples of rhythmicity in organizations are the effects of the seasons, sales ups and downs, and recurring holiday periods, such as a Christmas break. In a change process, the characteristics of rhythmicity of organizational change are, for example, the announcement and communication moments at the start of a project (rhythmic characteristic 'intonation'). During the change process, repetitions of the communication of the objective clarity on moments of expected involvement and action moments for the participants (rhythmic characteristic 'frequency') are necessary elements. At the end of an organizational change feedback of the results is a necessary prerequisite to facilitate the motivation for participation in new change projects (rhythmic characteristic 'emphasis'). In the study, attention was paid to the rhythmic characteristics of the organization and the rhythmic characteristics of an organizational change.

With the study of organizational change and the model of organizational rhythmicity the organizational rhythmicity in organizations can be measured. During an organizational change, the rhythmic themes can be mapped in rhythmic schedules. The study shows that after recording and assessing the results of the questionnaires (a baseline assessment and a final measurement), suggestions can be done for successfully applying the rhythmic factor in change processes.

#### Conclusion and Implications for Research/Practice

With this study, it has become clear that organizations should recognize and acknowledge

rhythmics of organizational change as an important success factor of organizational change. With this, they have a new instrument at their disposal to record and improve a characteristic of organizational change processes that was not identified earlier.

The study shows that organizations have different scores concerning the rhythmics characteristics. The study indicates that organizations have different rhythms and that it is possible to manage the various rhythmics characteristics. Also, the study shows that the rhythmics of an organization in general differs from the rhythmics of the specific change. This shows that suggestions for improvement can be done to connect the rhythmics characteristics in the organizational process to the rhythmics characteristics of the organizational change process.

The measurements of the rhythmics characteristics before and after a change process (baseline assessment and final measurement) show that the rhythmic instrument (Questionnaire Organizational Rhythmics and based on that formulating improvement actions) reacts sensitive to specific organizational change processes. After the baseline assessment in the study, reports of the outcomes with the rhythmics interventions were given to the participating organizations. This showed that a study on these aspects of organizational change within their organization was never done before. Also highlighting what goes well in terms of organizational rhythmics in an organization is an important aspect to be more successful in future organizational changes for employees and managers, and the organization. In our presentation we present the results of the measurements and the results of the interventions.

The future exploration of improving organizational changes by organizational rhythmics concerns an innovative and promising development. In the Netherlands for involvement

with organizational change of employees and managers it is important to involve the Works Councils (a council of employees with jurisdiction in terms of labour relations) of the organizations as well as the individual employees and managers. With the 'model of organizational rhythmics' the involvement of employees, managers and the Works Councils with changes can be strengthened by analysing the rhythmics characteristics with the Questionnaire Organizational Rhythmics and, based on that, formulating actions for improvement.

### **High Trust Culture – A Driver of Organizational and Leadership Success**

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#### **State of the Art**

Stephen R. Covey (2006: The Speed of Trust) was one of the first to introduce the idea of a high trust culture within organizations. He proposed the relevance of trust as being an integral factor which influences relationships in work life. Taking the emergence of business scandals and a re-focus on structures and processes (e.g. in the sense of compliance) as a starting point, Covey's approach proposes to put a higher emphasis on trust in the professional as well as private sector.

In addition, long lasting experience in the field of organization and leadership development suggests that the existence of trust and its lack indeed have an impact on the concerned contexts, environments and people in today's work life. The performance of organizations, in particular of complex organizational systems, depends on a multitude of interdependencies. No matter how differentiated and elaborated organizational structures and processes might be, no matter how simple and clear business models might be perceived from the outside of companies – the interplay of all relevant factors seemingly needs a 'lubricant' which is hard to measure: trust.

### New Perspective/Contribution

However, until today, there is only a limited line of research in the realm of organizational psychology and the like when it comes to high trust culture. This conference contribution thus presents a new study, which takes Covey's idea one step further.

The study is based on the assumption that trust can reduce complexity. The degree of a trust culture directly impacts the 'process parameters' time, budget, and quality.

Two major guiding questions are: If these parameters are measurable, to what extent does this mean that a trust culture is measurable, too? And, which interventions can influence a trust culture in organizations in a positive and measurable way?

The study hence draws upon the practical experiences of practitioners in the fields of organizational and personnel development within selected organizations which participate in the study. The data ascertainment is carried out by psychological-scientifically facilitated focus group workshops and group interviews with executives, respectively. It is further supported by a quantitative structured survey.

### Conclusion and Implications for Research/Practice

The value added by this research is on the one hand to gather awareness for the relevance of a high trust culture within organizations – and for the organizational actors who take responsibility for shaping a trust culture (e.g. HR professionals). On the other hand, the study aims at delivering concrete insight into the impact of trust on the success of organizations and individuals within. What is more, it delivers insight on the measurability of 'soft factors.'

In a more practical sense, the study furthermore aims at a focused data ascertainment which allows for deriving specific organiza-

tional actions in order to implement and cultivate a high trust culture. Not least, a benchmarking with different organizations across industry, size and business model is a further deliverable.

There are several strategic goals within organizations which are expected to benefit from insight on the research topic 'high trust culture,' like employer branding, vision development, leadership efficacy, and organizational growth. Moreover, a more pronounced trust culture may be expected to contribute to a simplification of processes as well as collaboration and communication on different levels, namely on an inter-individual, an intra-organizational, and even an inter-organizational level.

## Single Papers

### **Tensions of Transformational Change: When infrastructure transition and service design collide**

#### ***Nominee of the EAWOP Congress 2013 Best Paper Award***

*Danielle Tucker (Imperial College, UK) [danielle.tucker@imperial.ac.uk](mailto:danielle.tucker@imperial.ac.uk), Jane Hendy (Univ. of Surrey, UK), James Barlow (Imperial College, UK)*

#### **Purpose**

Organisational change and development within healthcare organisations is fraught with difficulty. Innovation and transformation of services increasingly involve both environmental change (including the physical infrastructure) and service design processes (work re-design), which occur simultaneously. However, the challenge of this complexity has not received adequate attention in organisational psychology literature. Specifically, research fails to examine the cognitive challenges for individual level employees.

In this paper we ask what are the cognitive challenges which arise from simultaneous service and infrastructure change?

#### Design/Methodology

We present data from a longitudinal qualitative study of three high profile, hospitals (in the UK, USA and Canada) simultaneously transforming the built environment and service design processes. Data currently includes 150 interviews, over 200 documents and 31 hours of observation.

#### Results

Despite different approaches to change management by our case studies, we identify three key generic tensions faced by organisational members: information overload, task ambiguity and conflicting design and process schemata. We discuss these tensions in relation to cognitive theories such as cognitive dissonance, cognitive load theory.

#### Limitations

At present this study has only addressed short-term outcomes of change management. A further phase of data collection (in 2013) will address long term challenges and outcomes.

#### Research/Practical Implications

This research will be used to construct a model of 'best practice' for organisational change planning in healthcare which can be applied to future ventures.

#### Originality/Value

This research addresses an important gap in change management literature, offering useful insights into how individual members cope with this level of change complexity.

### **Predicting individuals' legitimization of organizational downsizing**

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#### Purpose

Past research has shown negative effects of downsizing for organizations and for all people involved. Despite this, organizational downsizing seems to have become an institutionalized management practice. The present study examined whether even individuals legitimize organizational downsizing as a function of subjective prevalence, just-world belief, job insecurity, and political orientation, using arguments derived from cognitive dissonance theory.

#### Design/Methodology

A total of 340 employees from different companies were surveyed about their attitudes towards organizational downsizing as (a) financially effective, (b) inevitable, and (c) liberating for laid-off employees. Subjective prevalence of downsizing, just-world belief, job insecurity, and political orientation were also measured.

#### Results

As expected, subjective prevalence and just-world belief positively predicted legitimization of downsizing as financially effective and inevitable; just-world belief also positively predicted perceptions of downsizing as liberating. Contrary to our dissonance argument, prevalence was negatively related to perceptions of downsizing as liberating. Job insecurity significantly moderated this relationship: People with high job insecurity perceived downsizing as particularly liberating if they believed downsizing to be less prevalent. Left-wing political orientation and egalitarian/democratic values were negatively related

to legitimization of downsizing as liberating or inevitable, respectively, thus contradicting our expectations.

#### Limitations

This research was based on self-reports using a cross-sectional design.

#### Research/Practical Implications

People's cognitive legitimization of downsizing and layoffs may contribute to an expansion of organizational downsizing, although implications for laid-off employees, layoff survivors and/or organizations are largely negative.

#### Originality/Value

This study provides new insights into the institutionalization of downsizing as a widely accepted strategy.

### **What makes a high performing community of practice?: Measuring performance in the HE sector**

*Pamela Yeow (Univ. of Kent, UK) [p.m.yeow@kent.ac.uk](mailto:p.m.yeow@kent.ac.uk), Alison Dean (Univ. of Kent, UK), Danielle Tucker (Imperial College Business School, UK), Linda Pomeroy (Imperial College Business School, UK)*

#### Purpose

Many changes have taken place within the UK Higher Education sector recently, including research funding cuts and the significant increase of tuition fees suggesting that universities are under increasing financial pressure. One key challenge is bridging the perceived gap between teaching and research which are associated with different performance measures.

It is argued that universities need to work collaboratively to meet new demands. We use theories of "communities of practice" to understand networks within a university department and how this can lead to meeting this new agenda.

A 'community of practice' refers to a collection of people who engage in some common ongoing endeavour (Lave & Wenger, 1991). Balkundi and Harrison (2006) highlight the importance of leaders with high centrality in densely configured teams.

#### Design/Methodology

We use archival data, and social network analysis to unpack the formal and informal clusters within the community and compare the different roles and characteristics of formal group heads in relation to performance measures.

#### Results

Network clusters often failed to correspond with formal groups. Clique analysis showed that social clusters existed as well as research and teaching groups. Differing types of brokerage were related to performance outcomes.

#### Limitations

Results have limited generalisability, and are reliant on participants' recollection of events.

#### Research/Practical Implications

SNA applied within universities can develop better performance within knowledge intensive settings.

#### Originality/Value

The use of social network analysis in a higher education setting is valuable in helping us to understand significant changes in the sector.

### **The (mis)management of layoffs**

*Premilla D'Cruz (Indian Institute of Management Ahmedabad, IN) [pdacruz@iimahd.ernet.in](mailto:pdacruz@iimahd.ernet.in), Ernesto Noronha (Indian Institute of Management Ahmedabad, IN)*

#### Purpose

The layoff literature is replete with prescriptive HRM guidelines and organizational justice data stressing the importance of advance noti-



fication, open communication, sensitive execution, and long-term support for employees who face or survive layoffs. Our study ascertained whether such exhortations were observed during the layoffs of the 2008-09 recession.

#### Design/Methodology

Drawing on van Manen's hermeneutic phenomenology which captures lived experience, conversational interviews were completed with IT professionals across India who had been laid off during the 2008-09 recession. Transcripts were thematically analysed.

#### Results

Four major themes emerged: facing employer intimidation, recognizing sudden unfamiliarity, identifying an unrelenting enemy and feeling overpowered. Participants reported shock and unfairness at the layoff programme which was planned in secrecy and the manipulation of performance data which led to them being targeted. Threat and abuse marked the layoff process. Depersonalized downwards bullying indicating the complicity of HR managers was pre-dominant.

#### Limitations

While the study facilitates theoretical generalizability, statistical generalizability needs to be established.

#### Research/Practical Implications

Apart from reiterating the relevance of prescriptive guidelines and organizational justice in the context of layoffs, the results emphasise the need for HRM to reinvent itself to embrace a dual focus on business interests and employee well-being.

#### Originality/Value

As well as evidencing no improvement in organizational change implementation, the study contributes to the workplace bullying literature where organizational change is an antecedent. Other than proposing the term

'compounded bullying' where interpersonal and depersonalized bullying are simultaneously present, the study questions the legitimacy of organizational power integral to the managerial process.

#### **At the end of the day we are all bankers: Social construction of organizational identity in mergers**

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Organizational members' experiences of the merger process are socially constructed by their pre-understandings, perceptions and reconstructions of their own, and their merger partner's identity. Their ability to see similarities between their professional and organizational identities influences whether or not a unified organizational culture develops. Even though different aspects of mergers and acquisitions (M&A) have been studied widely, longitudinal studies are still rare and limited attention has been directed at people's real time experiences. The purpose of the study is to explore the socio-cultural aspects of organizational members' merger experiences, focusing specifically on possible changes in personal interpretations and situational experiences as the merger develops. A longitudinal in-depth case study of two recent mergers in the Danish financial sector was carried out, building on interpretive and social constructionist traditions. 69 semi-structured qualitative interviews with 44 employees and leaders were conducted. The study finds that perceptions of "who we are" as an organization impact expectations and experiences of the post-merger integration process. The more similarly organizational members perceive that the merging partner's professional identity is to their own, the more likely it is that organizational culture and feelings of community develop within the first year of the merger process. In addition, the longitudinal

and real time design of the study unfolds new aspects of M&A processes by focusing on both employee and leader experiences. Its emphasis on the influence of identity construction and reconstruction in light of the current financial recession should interest scholars and practitioners involved in M&A.

### **Undermotivating change as a reason to craft a job: The moderating role of regulatory focus in the relationship between organizational change communication and job crafting**

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#### **Purpose**

Bottom-up approaches to organizational change propose that employees who craft their jobs adapt better to change. Although employees presumably craft their jobs when experiencing misfit with their environment, little is known about how this process unfolds during organizational change. Via two studies, we use regulatory focus and regulatory fit theory to describe aspects of the misfit that stimulate job crafting (namely, seeking resources, seeking challenges and reducing demands). As individual aspect, we conceptualized employee regulatory focus. As organizational aspects, we conceptualized quality (Study 1) and motivational potential (Study 2) of organizational change communication.

#### **Design/Methodology**

Study 1 was a 3-wave design with 1-year lag among 368 police officers undergoing organizational change. Study 2 was a weekly survey with three measurements among 65 employees of several occupations.

#### **Results**

When perceived organizational change communication is of low quality or motivational

potential, employee prevention focus is associated with seeking resources and seeking challenges. Furthermore, while seeking resources and challenges appear to have positive implications for employee work engagement and adaptivity, reducing demands has negative implications.

#### **Limitations**

Future research should examine (or manipulate) objective organizational change communication in addition to employee self-report.

#### **Research/Practical Implications**

Our studies provide managers with a framework whereby person-organization regulatory (mis)fit is the way to understand and lead successful organizational change.

#### **Originality/Value**

Literature suggests that regulatory fit benefits all employees. However, in one of the scarce empirical studies of regulatory fit during organizational change, we show that, when employing a change context, regulatory fit becomes more important in the case of prevention rather than promotion focus.

### **Development of the Business Coaching Behavioural Scale**

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#### **Purpose**

The coaching literature is dwarfed by studies demonstrating the overall effectiveness of executive coaching. However, very few studies have examined what executive coaches actually do to achieve successful coaching outcomes. This study identified the key behaviours that effective coaches display during coaching sessions, and developed the Business Coaching Behavioural Index (BCBI) to measure these behaviours.

**Design/Methodology**

We used an inductive approach by conducting semi-structured interviews with 20 experienced coaches and 15 coachees. The respondents were asked to describe the concrete behaviours that were displayed during each stage of a complete coaching process. These behaviours were independently classified by three researchers and one coaching expert into a number of dimensions. Several scale items were then written to represent each dimension.

**Results**

The interviews generated a list of 446 coaching behaviours, which were categorized into 11 dimensions. For each dimension, several items were written, resulting in a scale of 86 items.

**Limitations**

The BCBI's psychometric properties remain to be tested, but data collection is underway now.

**Research/Practical Implications**

This study answers the question "why are some executive coaches successful, whereas others are not?" We open the "black box" of executive coaching by identifying the key behaviors of coaches during coaching sessions. From a practical point of view, the scale can also provide valuable and concrete feedback to coaches who aim to improve their coaching effectiveness.

**Originality/Value**

To our knowledge, this is the first study to develop a scale assessing the concrete and observable behaviours of successful coaches.

**Perception of hierarchy and fear to speak. Predicting organizational learning in medical departments**

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*(Babes-Bolyai Univ., RO), Mara Bria (Babes-Bolyai Univ., RO), Alina Flestea (Babes-Bolyai Univ., RO)*

**Purpose**

We investigated mechanisms through which leadership style facilitates psychological safety and collective learning behaviors. Based on results of qualitative studies (Edmondson, 1996; Nembhard & Edmondson, 2003) we proposed that coaching behaviors displayed by the heads of the units' reduce the perception of hierarchy among health professionals (HPs), diminishing their fear to speak openly and having a positive effect both on developing psychological safety, and on manifesting learning behaviors.

**Design/Methodology**

Data were collected from 416 HPs, in 30 departments of a teaching hospital in Romania. A referent-shift composition model was used for aggregating data at unit level for the group-level relevant constructs. Interrater agreement (awg) and interrater reliability coefficients (ICC) were calculated in order to check for with-unit consistency and between unit variability. Multilevel modeling was used to test the hypothesized relationships.

**Results**

Coaching was found to reduce fear to speak, through reducing perception of hierarchy. Fear to speak mediates between coaching and psychological safety. Psychological safety was found to mediate between coaching and learning behaviors.

**Limitations**

The cross-sectional design implies a certain amount of caution towards the causality relationships. Participation to the study was voluntary, which might have selecting HPs who are more willing to speak freely about their work.

**Research/Practical Implications**

We draw on findings of highly descriptive, qualitative studies and tested specific rela-

tionships, contributing to the advancement of theory development on organizational learning.

#### Originality/Value

Our data reveals one of the mechanisms through which leadership behavior facilitates psychological safety and collective learning behaviors in medical units.

### **Developing an organizational change facilitating agency's approach to system-wide development in health and social care**

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#### Purpose

The important role of change agents as facilitators of organizational development processes is well recognized. Change interventions can address several levels: individuals, group/units or organizational systems. To facilitate system wide changes in complex health and social service organizations multiple facilitation approaches are needed. The purpose of this study was to examine an organizational change facilitating agency (OCFA) acquiring a new system wide facilitation approach.

#### Design/Methodology

The case study focuses on a regional support unit in Swedish health and social care, centered on care of the elderly and functionally impaired. Interviews, surveys, process diaries and observations of meetings provided data for qualitative content analyses.

#### Results

Respondents described a rocky journey and a learning loop providing insights on how to support development and learning for actors

on multiple organizational levels. The OCFA learning process included meta levels of reflection and parallel work with organizational pilot cases. Respondents reported enhanced analytical and problem solving skills and the previously vague OCFA role was clarified and expanded. During the studied period the OCFA group clarified and enlarged their mission and organizational role in communication with stakeholders.

#### Limitations

To fully understand the potential of OCFA and system wide facilitation approaches further investigations are needed.

#### Research/Practical Implications

Organizational development requires adequate change process support. How to attain such support is less known. The provided description of a support function acquiring a system-wide facilitation approach can aid future development of the OCFA function.

#### Originality/Value

This study contributes to the knowledge on how to develop the approaches used by an OCFA to facilitate system-wide organizational development.

### **A case of organizational change in a health organization through action research approach**

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The aim of the study is improving organizational change in a health structure through action research approach. Since the early '90s, the Italian National Health Service has been subjected of an intense reform, which has brought profound changes throughout the health system. It is occurred a "process of corporatization" of public health sector, with a shift from highly bureaucratic organizational forms to a management results-oriented. This

project aims at strengthening and enhancing quality through analysis of critical issues developing communication strategies consistency with structural and organizational change in a Hospital in Milan. The action research model we proposed aims at developing, acting not only on the skills and tools, but also on culture.

The project is structured in 3 stages: 1) Analysis of demand and need to guide communication strategies and training project through a qualitative-quantitative method. (25 Semi-structured interviews and 330 questionnaire survey were used to identify organizational need, priorities and ideas of change). 2) The training workshop was based on action learning model to implement a plan for improving organizational change. The improvement plan aims at implementing a communication plan consistent with the critical issues and solutions proposed by 100 participants submitted to the scrutiny of management group. 3) Track the results of their change and restructuring efforts through customer satisfaction questionnaire and a follow up of the qualitative and quantitative research.

This step is required to demonstrate in quantitative terms the change on external perceived image and on organizational identity and that action research can improve health care.

### **HRM and new public management in merged hospitals: Reconciling organisational and operational logic and learning**

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#### **Purpose**

Since the adoption of New Public Management as an organisational paradigm, there has been increased concern with 'institutional logics' and the degree to which explicit claims

by governments may be adopted in terms of rhetoric by top level managers without recognizing differences in management practice (e.g. Lok, 2010). The paper seeks to redress the claim of Legge (2005) that it is people rather than organisations that learn by identifying how managers' perceptions of greater economic efficiency can be reconciled with purposeful engagement at work for health professionals (Nishii et al, 2008; Guest, 2011).

#### **Design/Methodology**

Within a grounded theory approach it reports on in depth analysis of fifty two (n=52) audio-taped, fully transcribed and coded semi-structured interviews with doctors as managers in a major European teaching hospital undergoing merger within a perspective of New Public Management

#### **Results**

The findings show that doctors as managers at operational unit and service levels are more concerned than higher managers even when they are doctors, that employees feel valued and respected by provision of extensive training, time for research to enhance clinical care. They also are concerned with economic efficiency but not at the cost of employee stress and burnout.

#### **Limitations**

A follow through questionnaire will assess this by multi-level analysis

#### **Research/Practical Implications**

Institutional logic (e.g. Lok, 2010) can be enhanced by recognising that perceptions of changed organisational logic by higher level management need to be reconciled with perceptions of effective operational logic by middle level managers to achieve effective change

#### **Originality/Value**

Integrates the literature on HRM, Learning and Institutional Logics



### **Organisational prerequisites for public sector managers in Sweden - A survey-feedback intervention**

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#### **Purpose**

The project is a survey-feedback intervention directed at managers in public sector authorities. We suggest that organisational prerequisites, such as manager/employee ratio and arenas for dialogues, affects the relations between organisational levels and managerial practices, that in turn affects both the managers' working conditions and performance. The aim is to present the intervention model and results of three complementary evaluations.

#### **Design/Methodology**

Twenty eight public sector organizations providing educational, social and technical services within seven local government authorities were selected. The managers (n=720) answered questionnaires before and after the intervention (2009 and 2011) and register and interview data were collected. 22 organisations constituted the reference group whereas six organisations took part in the survey feedback intervention. Support to facilitate change processes was provided. Three types of evaluations were applied: Quantitative effect evaluation, self-evaluation and process evaluation.

#### **Results**

Some organisations were very successful in changing the formal decision structure, the job assignments and the communication patterns. However change was not consistent among the intervention organisations. Process evaluation showed a link between intervention results and how the organisations handled the change processes.

#### **Limitations**

Interventions did not follow a strict protocol, all interventions were implemented differently.

#### **Research/Practical Implications**

Multisource and multi-method perspective is needed when evaluating intervention effects in organisations. The results show both facilitating and obstructing circumstances for organisational interventions that can be used in the design of intervention programs aiming at improving managers working conditions and performance.

#### **Originality/Value**

Intervention studies comprising many organisations are rarely performed which means that the results of the present study contributes to both research and practice.

### **Attitudes towards organizational changes in schools: Perspectives of headmasters**

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#### **Purpose**

Since 2006, an obligatory school inspection called Quality Analysis (QA) has been installed in North Rhine-Westphalia (NRW). This change poses new challenges to schools, which until then have been working independently to a considerable extent. Our research investigates the attitudes and emotions of headmasters which have resulted as reaction to this change. Research points out that there is a universal problem for people to look at feedback as a positive challenge (Eva, Armson, Holmbre, Lockyer, Loney et al. 2012; Frey 1982). Humans tend to dysfunctional behaviors and ratings (David, Lynn & Ellis 2010) and to interpret negative feedback as an indicator of their value, which leads them to develop a tendency to reactance and self-serving biases (Eva et al. 2012; Tesser 1988).



**Design/Methodology**

In order to investigate attitudes towards the newly installed QA in NRW, we interviewed headmasters (N = 50) who did not experience school inspection yet within a partly standardized focused interview. Data was analyzed both qualitatively and quantitatively.

**Results**

Results show that 42% of the headmasters had positive attitudes towards QA, whereas in 32% negative attitudes prevailed and 26% remained neutral. First results from a longitudinal section, interviewing headmasters about their attitudes towards QA after having experienced it, will be available in May 2013.

**Research/Practical Implications**

Implications on how change can be implemented into organizations more constructively will be presented.

**Originality/Value**

Since no studies independent from the Ministry of Education exist, our research offers valuable insights on how this instrument of change is accepted and integrated into schools by their leaders.

**Employee resistance to change in process innovations: A matter of innovation type**

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The relationship between employee attitude towards change and innovation success has been discussed for decades. However, most of the studies in this field only investigate the effects of resistance to change on performance or innovative behaviour at a global company level and do not focus on actual innovation processes. We therefore conducted a study to investigate employee resistance to change in N = 45 recently conducted process innovations. For every innovation project,

2-4 interviews were carried out with the people most involved. Using a mixed-method approach, the interviewees were also asked to fill in questionnaires on the extent of employee resistance, important process aspects and different innovation outcomes. Correlation analyses of the quantitative data show significant effects of resistance to change on improved working conditions. However, correlations between resistance to change and most economic success indicators were insignificant. The interviews also show that the concrete manifestation of employee resistance was highly dependent on the innovation type. Given the increasing importance of process innovations, the results can be regarded as a first step towards a more sophisticated approach to innovation processes. Due to the small sample size, further studies should focus on the challenges encountered to make for the successful accomplishment of different innovation types.

**Justice and employee reactions during organizational change: The mediating role of overall justice.**

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**Purpose**

Several studies have investigated the mediating role of overall justice in the relationships between the different dimensions of organizational justice and employee outcomes. Unfortunately, research has yielded inconsistent results. Moreover, none specific test of indirect effects was conducted when a mediated relation was hypothesized, or the Sobel test was used despite its imperfections. In order to address these limits, we first hypothesized that overall justice mediates the relationship between the dimensions of organizational justice and several employee outcomes and

assessed indirect effects using the specific bootstrap method. Second, as it is still fairly rare to join overall justice and organizational change, the mediating role of overall justice was examined in two contexts of change.

#### Design/Methodology

We surveyed employees who experienced a merger (N=156) or a downsizing (N=295). We used the SEM approach to assess the structural model and the bootstrapping technique to test indirect effects.

#### Results

In both samples, overall fairness was a strong predictor of employee outcomes. Moreover, depending on the context, overall justice was significantly explained by justice dimensions. The bootstrapping method indicated the significance of all the indirect effects in one sample, which supports the mediating role of overall justice.

#### Limitations

We used cross-sectional designs, which prevent causal inferences. Besides, data were self-reported which may conduct to same-source bias.

#### Research/Practical Implications

For managerial practice, our findings show the importance of fairness in times of organizational change. Indeed, employee attitudes are clearly predicted by overall justice perceptions.

#### Originality/Value

We studied overall justice in two actual contexts of change and tested its mediating role using bootstrap.

### **Feeling bad and good: The daily experience of ongoing change**

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#### Purpose

Organizational change has mainly been described as causing negative emotional reactions for a variety of reasons. The majority of those studies focus on retrospective accounts of change projects or generalize across a range of change events. However, change is likely to have a significant effect on daily experiences at work. We draw on AET to analyse the effects of daily positive and negative change events.

#### Design/Methodology

485 employees undergoing major change completed a daily diary for 10 working days, measuring daily OCB and engagement, as well as event-related experiences, including emotional reactions, fairness, and the perceived cause of the event. We followed up with a survey.

#### Results

Results show that negative experiences are more frequent than positive experiences (2:1). Senior managers report more positive, while middle managers report more negative events compared to employees. Both positive and negative daily change events predict end of day outcomes (mediated by emotional reaction), but over time, the number of positive, but not negative, daily change events predicts engagement and OCB 3 months later.

#### Limitations

All self-report data.

#### Implications

Our study has implications for theory and practice. Contrary to common belief, it suggests firstly that the little events in change matter significantly in predicting attitudes and behaviours and secondly that while negative change events are experienced more frequently, positive experiences are a stronger predictor of outcomes over time.

## Value

We present the first analysis of change at a daily level, using an event-based approach, focussing on how change trickles down to everyday experiences at work

**How does one's leadership orientation influences the result of employee participation during organizational change? An empirical study**

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## Purpose

Individual commitment to change has been found important to increase the possibility for successful change. In this study two potential antecedents are explored, as well as their interaction: individual leadership orientations (cf. Drath, 2001) and employee participation during organizational change. We hypothesized that the impact of participation on commitment to change is dependent on one's leadership orientation. More specifically, we expected that for an individual with a personal dominance orientation of leadership (i.e. viewing leadership as something that people possess as a result of their position or individual traits or both), commitment to change will reduce when (s)he participates in the change process. For an individual with a developmental orientation toward leadership (i.e. viewing leadership as something as the most influential person in a group after an active process of negotiation), commitment to change will increase when (s)he participates in the change process.

## Design/Methodology

A cross-sectional field study in two police organizations, both recently created through mergers, is presented (N= 114) to support the hypotheses.

## Results

Stepwise hierarchical OLS analysis supported both hypotheses.

## Limitations

It remains to be tested if the results can be generalized to other professions.

## Research/Practical Implications

Participation of employees in the change process is often considered a best practice. This view is challenged in this study, by revealing that it might only be true for employees who have a developmental orientation toward leadership.

## Originality/Value

This study contributes theoretically and practically to the leadership and change management literature, and is the first to link the variables studied, both theoretically and empirically.

**The role of emotion regulation during organisational change**

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## Purpose

The fast pace of organisational change implies increased pressure on employees to be adaptable and tolerant of uncertainty. Since changing and uncertain work situations often elicit emotional responses, emotion regulation is considered an important factor underlying employee adaptability.

The present study investigated the role of emotion regulation strategies (ERS) in change situations using Gross' model (2002) that distinguishes between antecedent and response focused ERS. In line with this model, we proposed that antecedent focused ERS (situation modification, reappraisal, rumination) would mediate the relationship between job insecurity and resistance to the change; whereas

response focused ERS (suppression) would moderate the relationship between resistance and job dissatisfaction.

#### Method

The study was conducted in six companies undergoing a change; 194 employees (46.2 % response) filled out a questionnaire. A pilot study was conducted to develop scales for ERS.

#### Results

The findings supported the research model to a great extent.

#### Limitations

The cross-sectional design of the study hinders drawing causal inferences.

#### Research/practical implications

Organisations that are planning a change could pay more attention to how employees deal with the uncertainty implicated by the change and regulate their emotions in order to create a more open and happy work force.

#### Originality

By focusing on the role of emotion regulation for employee responses to change situations, this study extends research on emotions in organizations and research on job insecurity.

### **The reasons behind change recipients' behavioral reactions: A longitudinal investigation**

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#### Purpose

This study analyzed the behavioral reactions of employees to change and their associated reasons for or against a large-scale technological change implemented in a bank.

#### Design/Methodology

A total of 152 bank employees located in 40 bank branches participated two times in

providing critical incidents regarding their initial and midcourse reactions to this change.

#### Results

Results showed that anticipated benefits associated with change initiate positive reactions to change. These reactions are maintained positive due to supervisory support. Resistance is activated by perceived high cost low benefit change at hand and it is shifted to active support when there is open communication and supervisory support.

#### Limitations

Rumors about change implementation affected the change recipients' reactions and reasons before such recipients actually experienced the change for themselves.

#### Research/Practical Implications

Initial behavioral reactions are justified by reasons related to individual factors, to the internal context, and to the impact of change. In T2, these reasons are not as strong as they were during the initial phase of change, and change recipients are influenced mainly by reasons associated with how the change is managed and whether change recipients feel supported during this process. This finding may have some implications for practice as change managers may think to be engaged in activities of explain change consequences and put emphasis on possible gains early enough in a change project.

#### Originality/Value

The longitudinal research design allows for examining the reason change recipients choose to maintain, evolve, shift or change their initial reactions to change.

## Posters

### Creating the future: Successful, innovative partnership at the heart of the academy

*Roderick Ian Nicolson (Univ. of Sheffield) [r.nicolson@sheffield.ac.uk](mailto:r.nicolson@sheffield.ac.uk), John Cullen (Univ. of Sheffield), Kamal Birdi (Univ. of Sheffield), Stephanie Sturges (Sheffield Hallam Univ.), Paul Stokes (Sheffield Hallam Univ.)*

#### State of the Art

The preceding papers make cogent cases for different perspectives on Academy development. Here we merge these perspectives, subjugating them to the long-term vision, allied to the need for immediate, demonstrable, progress.

#### New Perspectives/Contributions

The major requirement of the stakeholder organisations was cost-effective success, in that they were funding participants at a time of austerity. Requirements for the Universities were impact and innovation - highly valued by the HE community. The longer-term objective for all was 'seeding' of the Academy via social networks, coaching and continuing dissemination.

The need to demonstrate impact led to innovative methods for assessing change. The combination of skill learning and action learning led to development an approach, 'Deliberate Action Learning', that harnesses the strengths of both. The need for participants and coaches to access workshop content for coaching and remembering months later led to the ViSuAL methodology for recording and subsequently experiencing module content.

The need for participants to communicate in the languages of organisational development led to shared experiences and social networks of lasting value. The comparison of practices

across organisations led to critical reflection and significant progress.

#### Research/Practical Implications

The 'shared adversity' and diverse backgrounds of participants and stakeholders led to fruitful innovations that transform the flexibility and power of organisational and societal change initiatives.

#### Originality/Value

The approach applies the principles and practice of 'good' organisational development to complex and important problems confronting today's society. The approach generalises well to other regions, sectors and ambitions.

### Attitudes of coaches towards computer technology in coaching

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#### Purpose

Coaching has become a widespread development practice. From executives to private individuals, people seek for help from professional coaches to achieve specific goals. Computer technology might make coaching practice more efficient and more accessible. For example, tasks and information could be pre-determined to strengthen minimum quality aspects. And progress of clients could be recorded, for example through evaluations by others or self-evaluations. Parts of the coaching process could be automated and face-to-face sessions replaced by web-based communication. However, coaches and clients often consider their interpersonal relationship as an important success factor. Thus, coaches might fear computer technology because they think it might potentially undermine this relationship

**Design/Methodology**

We explored attitudes of coaches towards the use of computer technology in coaching. A sample of coaches (N=161) responded to an online questionnaire about their opinions on the coaching process in general and about computer use in coaching.

**Results**

Coaches with higher Internet self-efficacy as well as higher preference for structure and success control in coaching processes have more positive attitudes towards computer use in coaching. No age or gender effects were found.

**Limitations**

It remains to be tested if our results generalize to coaches outside of Switzerland.

**Research/Practical Implications**

In the future, coaches with higher preferences for measurable goals, clear and proven coaching methods and success control will more likely use computer technology in coaching.

**Originality/Value**

The present study extends research on coaching practice by exploring correlates of coaches' attitudes towards a probable future innovation: the use of computer-based applications in the coaching process.

### **Exploring biographical differences during a longitudinal study of employee satisfaction**

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**Purpose**

The current world of work requires organizations to understand individual differences and manage diversity. Biographical factors as primary and secondary dimensions of diversity have been considered predictors of employee satisfaction. Several studies have been con-

ducted to determine the relationships between employee satisfaction and biographical factors such as age, gender, job level and race (Spector, 2006; Oshagbemi, 2003). While their findings are inconclusive, most are single rather than longitudinal studies. Therefore, the purpose of this study was to determine whether gender, race, job level and department groups differ significantly in the three years study of employee satisfaction in a sample of respondents within a South African context.

**Design/Methodology**

Employee Satisfaction Survey (ESS) measured employee satisfaction in 2003 (N= 1 140), 2007 (N= 920) and 2008 (N=759); using convenient samples. The participants voluntarily completed the survey and biographical questionnaire.

**Results**

Non-parametric tests conducted indicate significant differences between biographical groups in the three years study of employee satisfaction.

**Limitations**

Participants were all employed in one organization and a convenient sample was used instead of randomized group method, these affects generalization of findings to other organizational contexts.

**Research/Practical Implications**

Findings could help industrial and organizational psychologists to understand their diverse workforce and propose measures to improve employee satisfaction using individual differences. There is also an opportunity for future research in other organizational contexts.

**Originality/Value**

This study contribute knowledge regarding individual differences and employee satisfaction, based on biographical differences identi-



fied in the longitudinal study of employee satisfaction.

### **Innovative systems to support career development and work-life balance for female researchers in Tokyo Medical and Dental University**

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#### **Purpose**

To introduce the innovative systems to support work life balance and career development for female researchers in Tokyo Medical and Dental University (TMDU), and its impact on organizational change.

#### **Design/Methodology**

At TMDU, the rate of female researchers is low; as it is difficult for them to maintain both research life and child-rearing within the organization.

Therefore, we started the new program to promote "environmental improvement" and "awareness-raising" to support their career development and childrearing within TMDU. We provide "Career Counseling", dealing with concerns such as "future career path", "balancing work/study and life/childrearing/ ". We provide "Sick Child Care Service", which in the event children suddenly develop symptoms such as a fever, then children's nurse will be sent out to user's residence. We provide "Research Support Personnel Assignment Activity" that provides research support personnel for female researchers who have difficulty in continuing their career due to childbirth, nursing and care-giving.

#### **Results**

After the project of five years from 2008 to 2012, the percentage of female researchers within TMDU rose from 16.8% to 19.0% (tenured position) and from 29.0% to 47.5% (non-tenured position).

#### **Limitations**

The rate of non-tenured position is higher. It still needs to implement methods to adopt more tenured-positions; as it provides stable situations for employment and preparing for childrearing.

#### **Research/Practical Implications**

These results imply that this innovative project has impact on the retention for female researchers, and continuous approaches should be implemented for further environmental improvement.

#### **Originality/Value**

This is the first time to systematically introduce the organization's system and its' outcome in international conferences.

### **The importance of formative evaluation in coaching processes**

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*(Münchner Institut für systemische Weiterbildung (misw)), Thomas Steininger (gevainstitut Gesellschaft für Verhaltensanalyse und Evaluation mbH)*

This study deals with the topic of formative evaluation in coaching processes and the development of an evaluation tool for quality assurance in coaching processes. The formative evaluation is important and helpful in coaching processes to correct the development of the client. As a result, the goal of this empirical work is the analysis of the coaching influences and the effectiveness of the coaching process.

In this qualitative study, 14 full-time or part-time coaches were asked about reasons for and effects of coaching as well as which connections can be identified between these factors. The data was analyzed following the qualitative content analysis method according to Mayring.

The results provide a detailed overview of the factors involved in and effects of the coaching process. Most coaches do not evaluate the coaching with their clients during the process but confirm the necessity of a formative evaluation. Usually, the coaches evaluate in the form of a summary evaluation at the end of the coaching process. It is crucial to use formative evaluation during the coaching process to adjust the coaching methods and the changes of the client.

The results of this qualitative survey provide the basis for further systematic studies and offer a basis for an evaluation tool for quality assurance in the coaching process.

### **What w/o-psychologists should learn from the 'science of influence'?**

*Henry Honkanen (Arena Nova Consulting Group, Helsinki, FI) [henry.honkanen@kolumbus.fi](mailto:henry.honkanen@kolumbus.fi)*

#### **Purpose**

In this paper are analyzed how the results of influence science can be applied in field of work and organizational psychology, especially in the spheres of leadership and change management. Further it is outlined how the w/o-psychologists or change agents could use different influence methods and tactics when trying to bring about behavior change in the client system

#### **Design/Methodology**

A number of recent academic and popular publications that are focused to understand psychological processes related to social influence and persuasion are analyzed and reviewed. Once the social influence research was in the very core of the experimental social psychology. Then influence research is done mostly in the sphere of more applied disciplines such as economic and consumer psychology (Cialdini 2001). Lately the research applications of behavioral economics (Kahneman 2011, Thaler&Sunstein 2009) have

caused a revolution in the field of influence discipline. Some scholars see a new "science" of influence been born.

#### **Results**

Based on the works of Kipnis (1984) and Yukl (2010) a new model of influence tactics is delineated. Also a systemic intervention model of influencing is presented. The model consists of 1) the role of the influencer, 2) the properties of the influencee and 3) the nature of the context. The practical benefits, problems and ethical questions related to the usage of influence and persuasion tactics are discussed.

#### **Limitations**

The models are based only on conceptual and theoretical analyzes.

#### **Research/Practical Implications**

Understanding the psychological processes underlying influencing can give new tools for change management and consulting.

#### **Originality/Value**

Influence is not much yet studied in w/o-psychology

### **Work stressors: Relations with perceived organizational support and organizational commitment within merger settings**

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#### **Purpose**

Mergers and acquisitions typically involve major changes in the workplace and transition structures and thus affect employee attitudes and behavior. On the negative side, stress, lack of commitment, reduced satisfaction and performance and withdrawal behaviors have been identified as major problems related to such activities. The primary purpose of this study was twofold: a) to verify the results of existing research (e.g. Cartwright, Tytherligh, & Robertson, 2007) in a different cultural con-

text (namely Greece) and b) to examine, in the context of two recently merged organizations, how perceived organizational support moderates the relationship between perceived job stressors and organizational commitment.

#### Design/Methodology

Data was collected three years after the completion of the merger. Our final sample was composed of 55 employees from organization A and 85 from organization B. 56.1% of participants were aged 37 - 55, and 66.1% were female.

#### Results

We confirmed the results of previous research regarding the role of work stressors, for example, work-life balance and work overload, and established organizational support as a valuable moderator.

#### Limitations

A longitudinal design, although difficult to implement within merger settings, would be most helpful in unraveling the ways employees respond to merger.

#### Research/Practical Implications

To minimize the negative effects of a merger situation on employees, managers and practitioners should offer support to their employees, and specifically to those recruited before and especially after completion of the merger or acquisition.

#### Originality/Value

The contribution of this study lies in its expansion of the current framework in mergers and acquisitions, through the inclusion of interacting variables.

### **Beneficial and useful to mentor group in a university context**

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#### Purpose

The purpose of this study is to evaluate the effectiveness of a mentoring program at university environment based on academic setting knowledge gained by mentors.

#### Design/Methodology

We used a quasi-experimental design with repeated pre- and posttest measures, with experimental group made up of mentors students (n=33) and a control group, made up of students who did not participate (n=70). To assess the academic setting knowledge a protocol of 26 open-ended questions was used, contained questions regarding the resources available, the academic and administrative organization, offering undergraduate and graduate training, the various career options for which fitted him for college they were studying and professionals to perform different actions to enter the workforce upon completion their university education

#### Results

The results show a statistically significant increase in the knowledge acquired about the academic setting as a consequence of the mentoring program, as their levels were similar before the program

#### Limitations

The generalization of the results found is subject to some limitations of the sample used in this research particularly, its size.

#### Research/Practical Implications

In view of the results obtained, it seems that the mentors gained more benefits from the program, perhaps because they prepared spe-

cifically for their role in it, developing the contents of the sessions, transmitting them, and perhaps, increasing their levels of responsibility and maturity. Originality/Value This study can prove mentors gain in peer mentoring programs. Besides we obtain information about whose areas of knowledge where there was more learning and make recommendations on the areas where it is more interesting to deepen in future programs.

### **Back to the future: Reviving socio-technical systems theory**

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#### **Purpose**

This paper aims to demonstrate to the Organizational Psychology community that Socio-Technical Systems Theory (STST) and its associated principles are still as relevant today as when they first appeared in our domain in the 1960's. To this day STST maintains that both social and technical aspects must be jointly optimised in order for a system to function at its best (Clegg, 2000).

#### **Design/Methodology**

This paper will present research from an ongoing change programme within a large multinational engineering organization. A socio-technical framework has been adopted with the use of interviews, questionnaires and scenarios planning workshops. The involvement of the end-users of the system is emphasised throughout.

#### **Results**

A number of socio-technical analyses have been conducted across the organization, requirements captured and solutions designed to create an improved design system that will meet the needs of its end users. Solutions include the development of a competency

framework, process principles and role redesign.

#### **Limitations**

The researchers must continue to adopt a systems perspective and the technical and social features must be recognised to be interacting and interdependent rather than in isolation of each other.

#### **Research/Practical Implications**

The organization will have an improved, highly efficient and more competitive design process and be educated on the merits and application of a socio-technical approach.

#### **Originality/Value**

This research aims to highlight the importance of STST in today's working world and society. Future use of STST will be discussed and how this approach could help with understanding recent societal problems such as the banking crisis and the London riots.

### **Hierarchy or holdings? The case for managers' relative autonomy in implementation of change in hospital mergers**

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#### **Purpose**

It has been recognized (e.g. Raes, Heijltes, Glunck & Roe, 2011) that there are conflicts and lack of trust between top management teams (TMT) and middle managers (MM) in implementing change. Mørk, Hoholm, Maaninen-Olsson and Aanestad (2012) have claimed that new practices may destabilize boundaries. This paper considers how this may be dysfunctional unless change can achieve coherence in organizational logic and relative autonomy for operational logics. In the context of mergers between hospitals it argues that a standard top-down template in terms of performance criteria needs to recog-

nize and reconcile how different boundaries are perceived by top level and middle level managers, as well as facilitate mutual learning across levels of operational management. Also that unless operational managers have 'voice' (Hirschman, 1970) on how change should be effected, tacit rules and implicit norms (Oliveira, 2002) may frustrate what Argyris and Schön (1974, 1978, 1996) have identified as 'double-loop' learning.

#### Design/Methodology

Within a grounded theory approach it reports on in depth analysis of fifty two (n=52) audio-taped, fully transcribed and coded semi-structured interviews with doctors as managers in a major European teaching hospital undergoing merger within a perspective of New Public Management.

#### Results

The findings suggest that there is more openness to and consent for innovation by middle managers in a 'boundaryless organisation'.

#### Limitations

A follow through questionnaire will assess this by multi-level analysis.

#### Research/Practical Implications

Effective change implementation needs to avoid top-down Weberian hierarchy and paralleling lateral learning in well managed private sector holding companies.

#### Originality/Value

Integrates the literature on strategy formulation and implementation with change management.

### **Strategic management with ProMES: An integration of a psychological method for productivity enhancement with elements of the balanced scorecard**

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*rich Alexander Univ., Erlangen-Nuremberg, DE), Klaus Moser (Friedrich Alexander Univ., Erlangen-Nuremberg, DE)*

ProMES is a psychological method that was installed successfully in several companies to measure and enhance organisational productivity. Within the scope of a case study, ProMES was implemented as a control mechanism for the first time.

The system was developed from the management board of a consultancy company in the timeframe of October 2010 till September 2012. To make it applicable for the process of strategic management, the concept was extended with elements of the Balanced Scorecard (BSC).

The case study was accompanied from one moderator. In a preparation stage the management board defined their vision of the company. In the development stages, the ProMES-System was elaborated for a three-month period. Thereby four objectives, eleven indicators and four strategic KPIs were set along side the indicators. On the basis of a strategy map assumptions were made about cause-effect chains. During the baseline stage over a timeframe of three months data inquiries were proceeded without receiving feedback. In the following feedback stage the management board were giving monthly feedback about their performance.

During the implementation of ProMES an increase of productivity with an effect size of  $d=1,67$  was observed. An analysis about the connection between ProMES-Indicators and strategic KPIs showed that specific Indicators were identified to have a significant effect on financial success. Supporting prior research on ProMES, the application yielded to an improvement of the team climate in the field of task-related cohesiveness.

Starting points for further research activities are discussed and considerations are ad-

ressed for the practical application of ProMES in connection with the BSC.

### **The development of a situational judgment test for the selection of effective change agents**

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#### **Purpose**

Both previous research and practical experience have shown that most change management attempts commonly fail at their early stages. Only recently change management literature has shown a shift towards people management issues such as attitudes, emotions and personality traits, still ignoring though practical issues on what constitutes an effective change agent. Building on the Theory of Planned Behavior (Ajzen, 1991) and basic psychometric theory, we developed a Situational Judgment Test assessing change agents' competencies. The aim of the paper is to describe the development of the tool and the first attempts to validate it and explore its psychometric properties.

#### **Design/Methodology**

Two studies are described here. The first study explores the construct validity of the SJT with the participation of 160 employees across different organizations. The second study explores the criterion-related validity of the measure with 220 employees employed in four different organizations.

#### **Results**

The SJT demonstrated excellent psychometric properties, both through traditional factor-analytic approaches, but also through structural equation modeling.

#### **Limitations**

It remains to be tested whether this tool is applicable to different types of organizational changes.

#### **Research/Practical Implications**

A virtue of this research is that a measurement tool has been developed to increase the chances of proper selection of change agents and minimize the possibilities of change effort failure.

#### **Originality/Value**

To date neither empirical contribution nor theoretical evidence has been made on identifying variables serving as criteria for an integrated and robust selection process for change agents.

### **Trust and distrust as complements in change processes**

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#### **Purpose**

While trust has mostly been seen as a positive prerequisite for organisational change, distrust has been considered its negative counterpart. Only in the last few years have the positive consequences of distrust attracted more attention. Distrust fosters critical reflection that prevents naive risk taking and group think. In the "conflict partnership" between management and works councils distrust can facilitate critical reflection on the implementation and unregarded side effects of a change process, which should foster knowledge growth. In order to prevent critical reflection from ending up in relationship conflicts, trust between both groups is necessary.

#### **Design/Methodology**

The assumptions have been tested in a field study. The main actors from manage-



ment and works council in n=44 change processes were asked to rate their level of trust, the degree of critical reflection and the knowledge growth.

#### Results

The moderation analysis reveals a significant interaction effect between trust and critical reflection on knowledge growth. Knowledge growth is highest, when trust and critical reflection are high and lowest, when trust is low and critical reflection is high.

#### Limitations

The results remain to be replicated in a bigger sample. Different forms of trust and distrust could be differentiated.

#### Research/Practical Implications

The results suggest that trust and distrust should not be seen as opposing concepts, but rather as complements, that affect the process in different ways. Both are necessary to reach optimal knowledge growth.

#### Originality/Value

This is the first study to systematically analyze the interplay of trust and distrust between management and works councils and their role in change processes

### **What differentiates companies successful in dealing with change from unsuccessful ones?**

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#### Purpose

The purpose of the study was to investigate in detail the differences between those organizations that consider themselves successful in dealing with change vs. those that consider themselves not successful.

#### Design/Methodology

An online questionnaire was designed on the basis of existing theories of change at the organizational level and mailed to organizations located in Germany. The instrument included 105 items investigating practices in dealing with past changes as well as change readiness and competencies in dealing with change at the organizational, the leadership and the level of employees. The total sample of 258 responses was split into those reporting >75% and those reporting <25% success rate in dealing with past changes and compared. This resulted in 114 usable questionnaires.

#### Results

The results of the t-tests show that the differences between those organizations that consider themselves >75% successful in dealing with past changes versus those that consider themselves not very successful (<25%) were highly significant ( $\alpha < 0,001$ ). These differences are, among others, anticipating change, the role of culture in change processes, learning from mistakes, the kind of communication, available resources, structures and processes and their use as well as skills in dealing with change.

#### Limitations

All limitations apply that are associated with online questionnaires.

#### Research/Practical Implications

The results show clear areas for improvement in dealing with organizational change. Future research should refine the concept of organizational change-fitness.

#### Originality/Value

The results shed light on the important issue of organizational change.

### Development of an innovation organizational culture in Mexican companies

*Maria Leticia Verdugo Tapia (Universidad de Sonora, MX) [mlverdugo@pitic.uson.mx](mailto:mlverdugo@pitic.uson.mx), Josefina Ochoa Ruiz (Universidad de Sonora, MX), Elva Leticia Parada Ruiz (Universidad de Sonora, MX), Jose Maria Guarena de la Llata (Universidad de Sonora, MX), Sergio Ramon Rossetti Lopez (Universidad de Sonora, MX)*

#### Purpose

Know whether organizational culture is encouraging innovation, which is currently required to achieve competitiveness in a complex and dynamic environment for growth of Mexico.

#### Design / Methodology

Applies the instrument OCAI (Organizational Culture Assessment Instrument) developed by Cameron and Quinn 45 organizational leaders of the city of Hermosillo, Sonora, Mexico.

#### Results

Correlations, according to different assumptions regarding the size and type of business.

#### Limitations

The sample consisted of managers. It can be derived from this study, applications to various organizational levels.

#### Research / Practical Implications

Feedback the results to managers.

#### Originality / Value

The need to develop in Mexican companies, a culture of innovation through a strategic plan and action research.

### Conflict of values as the barrier and the resource of organizational development in the context of management paradigm shift

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#### Purpose

To detect the conflict of values peculiarities at the enterprises with the different degree of involvement into the modernization processes.

#### Design/Methodology

The system approach and rational-pragmatical approach (K.Cameron, R.Queen, M.Kuhn, T.McPartland, etc.).

#### Results

1.The modernization process is connected with the shift from the clan-hierarchy to market-adhocracy type of organizational culture (OC) through the hierarchy-market OC state. 2.Hidden value conflicts take place at the enterprises experiencing difficulties with modernization. These conflicts are based on the deficit of value orientation towards innovations and the relations value as the priority. 3.The indicators of value conflict: the discrepancy between the enterprise's OC and the requirements of the economic situation; differences in the employees' and management's evaluation of the desired OC development prospects; prevailing of beyond professional self-identifications of the employees, of the "close" type of the managerial decision making type; high level of avoiding style with at the same time much lower level of this style's presence assessment by the manager; high rates of cooperation and compromise styles presence in self-assessments not confirmed by the management. 4.The conflict of values contains the resource development component.

#### Limitations

Business type and organizational-cultural vector of development of the enterprise determine some specific manifestations of common regularities.

#### Research/Practical Implications

The indicators of the conflict of values, its peculiarities and characteristics of conflict relations at high tech enterprises point at the

presence of the resource component that can be used by the managers for the optimization of the organizational development.

Originality/Value

The results can be employed for the optimization of personnel management in the context of transition economics.



# 10. Labor market issues

## Symposia

### New Explorations of Age Effects at Work

Session Chair: *Lisa Finkelstein (Northern Illinois Univ.)* [lisaf@niu.edu](mailto:lisaf@niu.edu)

Facilitator: *Franciska Krings (Univ. of Lausanne)* [franciska.krings@unil.ch](mailto:franciska.krings@unil.ch)

#### State of the Art

This symposium brings together the work of research teams headed by emerging thought leaders in the area of aging at work who took active part in the EAWOP Small Group Meeting on Age Cohorts in the Workplace in November, 2011. Franciska Krings, Professor of Organizational Behavior at the Faculty of Business and Economics of the University of Lausanne, an expert in prejudice, stereotyping, and discrimination against older workers, will serve as discussant and integrate findings across studies to illuminate future research paths.

#### New Perspectives/Contributions

Researchers in the aging and work community (e.g., Baltes, Rudolph, & Bal, 2012; Finkelstein & Farrell, 2007, Perry & Parlamis, 2005; Posthuma & Campion, 2009) have called for new advances in measurement and further investigation of individual difference, contextual, and cultural boundary conditions of age effects on organizationally important outcomes. The body of research described here will provide new knowledge on measurement of age bias, cultural differences regarding the process of how age might impact several work attitudes, and the role of appearance in moderating the impact of age on leader potential ratings.

#### Research/Practical Implications

Those attending this symposium for research ideas will gain suggestions for broadening their measurement tools and expanding their nomological network of age effects at work. Those interested in applying research findings to their own multi-age work organization will learn more about conditions under and processes by which age may be contributing to decisions and behaviors in their workplace.

### ***Presentations of the Symposium***

#### **Traditional and modern ageism as predictors of workplace discrimination**

*Kathrin Rosing (Leuphana Univ. of Luneburg)* [kathrin.rosing@uni.leuphana.de](mailto:kathrin.rosing@uni.leuphana.de), *Hannes Zacher (Univ. of Queensland)*, *Lisa Finkelstein (Northern Illinois Univ.)*

#### Purpose

Previous studies have focused on traditional forms of ageism (i.e., explicit age stereotypes) as predictors of discrimination against older workers, whereas more subtle, indirect, and rationalizable forms of ageism have been neglected. Here we examine the impact of participants' level of modern ageism on simulated personnel selection decisions. Modern agists believe that discrimination against older workers is a thing of the past, that younger and older job applicants have equal opportunities, and that older workers receive more attention from organizations and the public than they deserve.

#### Design/Methodology

The first study (N = 204 university students and staff) was a cross-sectional online survey, the second study (N = 400 online workers) used an experiment design.

#### Results

Study 1 showed that traditional and modern ageism were moderately correlated, but that

only traditional ageism negatively predicted participants' ratings of older job applicants and decisions to invite older applicants instead of equally qualified younger job applicants for job interviews. Study 2 extended these findings by highlighting the differential effects of traditional and modern ageism in simulated personnel selection contexts with and without plausible business justifications for discrimination against older or younger job applicants.

#### Limitations

The use of cross-sectional data and simulations may be a limitation.

#### Research/Practical Implications

Different forms of ageism have independent effects on age discrimination. Our findings have implications for human resource managers who want to increase the age diversity in their organizations.

#### Originality/Value

We distinguish the concept of modern ageism from traditional ageism, and examine its consequences for personnel selection.

### **Age, relational climate, and work outcomes: The moderated mediational role of institutional I-C**

Justin Marcus (Ozyegin Univ.)  
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 (Hanze Univ. of Applied Science)

#### Purpose

Gellert and Schalk (2012) investigated relations between age, relationship quality, and work outcomes (job performance, job satisfaction, stress) among German residential-home workers, and found that relationship quality mediated relations between age and job satisfaction. We extend outcomes to also include intentions to quit, developmental opportunities, organizational commitment, and distributive justice, and examine Institutional Individualism-Collectivism (I-C) as a moderated me-

diator of this relation. Institutional I-C represents degree to which societal/organizational policies and practices emphasize collective behavior; the US is more Institutionally Collective than Germany (Gelfand, Bhawuk, Nishii, & Bechtold, 2004). Because collectivistic norms dictate subordination of individual to group goals (Triandis, 1995), it is expected that relationship climate may be a less consequential mediator in the US than in Germany.

#### Method

The mediational model will be tested on all outcomes using an archival, random sample of the US workforce ( $n=615$ ). Moderated mediation of Institutional I-C will then be tested on the three outcomes examined by Gellert & Schalk (2012), using both US and German ( $n=169$ ) samples. Relationship quality is operationalized to include job autonomy, supervisor support, trust, and respect; Principal Components Analysis indicated this operationalization to load onto one factor (Eigenvalue: 2.364; Variance explained: 59.1%).

#### Limitations

Strong causal inferences cannot be made because of the cross-sectional nature of the study design.

#### Research/Practical Implications

Evidence of the posited relations may necessitate continued investigation into influence of organizational/societal culture on organizational relationship processes involving older workers.

#### Originality/Value

The role of culture in mediational processes involving age and relationship quality is advanced.

### **Perceived leadership potential as a function of perceived age and physical attractiveness**



*Cort Rudolph (Florida International Univ.)*  
[cortrudolph@mac.com](mailto:cortrudolph@mac.com), *Edward Sullivan (Florida International Univ.)*

#### Purpose

The goal of the present study was to address how raters' impressions of leadership potential vary on the basis of perceived age and physical attractiveness.

#### Design/Methodology

In a within-subjects design, 166 raters (i.e., employed students with prior leadership experience) were shown a series of photographs of businessmen of varying ages. Raters were then asked to provide their impressions of the age and physical attractiveness of the target, and ratings of their leadership potential. Given the nested structure of this data (i.e., ratings were nested within raters), a random effects regression model was specified in which ratings of leadership effectiveness were regressed onto perceived age, perceived physical attractiveness, and their interaction for each target at level one (i.e., within-rater).

#### Results

The resulting model suggests that older and more physically attractive targets received higher ratings of leadership potential. Furthermore, there was a significant age by physical attractiveness interaction, such that older, more attractive targets received higher ratings of leadership potential than younger, less attractive targets. About 20.50% of the within-rater variance in perceived leadership potential was explained by this model. These effects were robust, and consistent when controlling for rater age, sex, and other work-related demographic variables (e.g., performance appraisal experience).

#### Limitations

The use of student raters may limit the generalizability of these results.

#### Research/Practical Implications

This study bolsters a broad body of research suggesting that perceptions of leadership potential are influenced by raters' impressions of target characteristics.

#### Originality/Value

Very few investigations have modeled these within-rater effects.

## Dealing with an Age Diverse Workforce Using Job Design

Session Chairs: *Sara Zaniboni (Univ. of Trento, IT)*  
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Facilitator: *Donald Truxillo (Portland State Univ., US)* [truxillod@pdx.edu](mailto:truxillod@pdx.edu)

#### State of the Art

The age-diversity of the workforce is increasing in most industrialized countries. Therefore, it is critical for researchers and practitioners to gain a better understanding of older employees and the differences between older and younger employees. However, research has only begun to examine the role of job characteristics and design strategies at different life stages (e.g., Truxillo, Cadiz, Rineer, Zaniboni, & Fraccaroli, in press). The papers in this symposium – using diverse samples from Germany, Switzerland, Italy, Norway, and the Netherlands– attempt to advance knowledge in this important research area from different perspectives and thus provide practical implications for contemporary employers.

#### New Perspectives/Contributions

The first three papers explore the relations among age, job characteristics, and different work outcomes (e.g., performance, work attitudes, stress), considering moderators and mediating mechanisms. The other three papers are focused on older workers, and the different organizational practices and work characteristics that can keep older workers

vital at work, affect the retirement decision and the intention to continue to work after the retirement.

#### Research/Practical Implications

Considering the increasing age diversity of the workforce, worker age should be considered a factor which could impact job design and other human resource strategies. Job design and redesign are costly processes for organizations, and it is important to understand the effects of job characteristics on different work outcomes considering workers' age.

### ***Presentations of the Symposium***

#### **Aging, work characteristics and job performance: An investigation of mediators, moderators, and different objective workplace outcomes**

*Heiko Schulz (Techniker Krankenkasse, DE) [Heiko.Schulz@tk.de](mailto:Heiko.Schulz@tk.de), Hannes Zacher (The Univ. of Queensland, AU), Holger Pfaff (Univ. of Cologne, DE)*

#### Purpose

On a bivariate level, previous research has shown weak relationships between age and dimensions of job performance. Researchers have therefore highlighted the need for new approaches to studying the age–performance relationship. So far, only few studies have examined moderators and mediating mechanism of this relationship. In this study, the Job Demands-Resources Model is used as a framework to examine whether experienced job demands and resources have a different impact on employees' work ability within various age groups. Moreover, it was tested whether these relationships hold for multiple sources and types of performance measures, such as absenteeism, health diagnoses, customer satisfaction, and work arrears.

#### Design/Methodology

The data used in this study came from 3,251 clerk officers recruited from 40 offices employed at Germany's most successful legal health insurance company.

#### Results

Results showed significant age differences in the amount of experienced work characteristics and employees' work ability. Furthermore, employees' work ability contributed to explaining variance in the company's key performance indicators, depending on the tasks of the office.

#### Limitations

The cross-sectional design does not allow inferences about changes in work ability and performance measures over time.

#### Research/Practical Implications

These results contribute to a better understanding of how the relationship between age and performance differs across tasks. Human resource (HR) professionals could consider the differences in age-related performance criteria before designing strategies for a sustainable and effective HR management.

#### Originality/Value

Our study is innovative because it examines relations among age, work demands and resources, and different objective performance measures.

#### **Age effects in the relationship between motivational work design characteristics and job satisfaction**

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#### Purpose

In consideration of the current demographic changes and their effect on the labor market, work design characteristics need to be reflected upon in terms of job attractiveness for older versus younger employees. We hypo-

thesize that age intensifies or mitigates the relationship between work design characteristics and job satisfaction and other attitudinal outcomes.

#### Design/Methodology

We tested our hypotheses with data from a survey of a representative sample of Swiss employees (N=1391) collected in summer 2012. Besides the six motivational work design characteristics (autonomy, skill variety, task significance, task identity, feedback from the job, participation), several attitudinal outcomes (e.g. job satisfaction, organizational commitment, turnover intention) were measured.

#### Results

The regression analyses showed that job satisfaction was predicted by autonomy, skill variety, and participation ( $\Delta R^2=.36$ ,  $p<.001$ ). However, the moderating effect of age was not supported. More complex analyses on possible confounding effects of other personal and context factors are still under way. Preliminary results of these analyses indicate that the moderating effect of age may be masked by employee's education and hierarchical position in the organization.

#### Limitations

The tested model did not include the whole set of motivational work design characteristics (e.g. job complexity, specialization) and neither social nor contextual work design features.

#### Research/Practical Implications

These results imply that age may affect the relationship between work design and job attitudes less than previously assumed and that other personal or contextual factors should be considered both in research and practice.

#### Originality/Value

This study's value is the comprehensive approach on the work design-attitudinal outcomes link.

#### Age and other potential moderators of the job characteristics-work outcomes relationship

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#### Purpose

Despite the increasingly age-diverse workforce, research has only begun to look at the combined role of age and job characteristics on work outcomes such as satisfaction, performance, and stress. Such effects could be expected from lifespan aging theories (e.g., Carstensen, 1991). Additional moderators besides age (e.g., adaptivity, subjective age, other job characteristics) may also affect the relationship between job characteristics and work outcomes. The purpose of the present study was to explore age and other moderators of the job characteristics-work outcomes relationship.

#### Design/Methodology

Data collections were in different organizations in Italy (e.g., public and private). At Time 1 participants were asked to provide information on job characteristics (Work Design Questionnaire -WDQ; Morgeson & Humphrey, 2006) and other individual variables (e.g., adaptivity, subjective age); at Time 2 (3 weeks later) participants provided information on work outcomes (e.g., job satisfaction, performance, job-related tension, workload).

#### Results

Dimensions of the WDQ showed a number of statistically significant interactions with age on work outcomes. Moreover, three way interactions were found with other individual diffe-

rence variables and job characteristics themselves.

#### Limitations

The major limitation is the use of self-report data.

#### Research/Practical Implications

Considering job design from a lifespan perspective could be an opportunity to address increasing age differences at work.

#### Originality/Value

The study examines age and other moderators of the effects of job characteristics.

### **HR avenues for older workers: A study on experiences and expectations of employees, line managers and HR professionals in health care organizations about HRM practices for 55+ workers**

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#### Purpose

The aim of the study was to construct an overview of, first, the prevalence of HR practices which are used in healthcare organizations to retain older workers vital at work. Second, the needs that exist with regard to these practices in three target groups were investigated: Older workers, line managers and HR professionals. Third, an evaluation of existing practices by these three categories of organization members was made.

#### Design/Methodology

As an overarching model for describing the practices and the corresponding needs and evaluations, the Job Demands-Resources model (Bakker et al., 2007) was used. 51 in-depth

semi-structured interviews were conducted in 15 hospitals and care and cure organizations.

#### Results

The results showed that maintenance HRM practices are far more prevalent in comparison with development practices. Both are evaluated as successful. Although the target groups' needs appeared to be strongly related to development HR practices, maintenance HR practices were also mentioned.

#### Limitations/recommendations for future research

Additional and more rigorous empirical research is needed on age effects of maintenance and development HR practices regarding demands, resources, and, consequently, vitality.

#### Practical implications

Maintenance and development HR practices are evaluated as effective. A list of the deployed HR practices and a list of needed practices will be provided and will be explored in detail.

#### Originality/Value

This paper aims to provide an overview of the prevalence of HR practices used to retain older workers. More specifically, the practices will be evaluated as regards their success from the perspective of employees, line managers, and HR professional.

### **How work design influences the career decisions of older workers: A qualitative panel study**

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#### Purpose

This research addresses older workers and their relationship to work. It aims at nuancing the understanding of how work design, work organisation, working conditions, and work-

place leadership relate to motivation for, and decisions about early versus late retirement. The interpretation of data leans mainly on the work of Morgeson & Humphrey (2008) and Baltes, Staudinger & Lindenberger (1990).

#### Design/Methodology

Interviews, lasting 40 to 60 minutes, were made with a random sample of 35 employees aged 58 years or more, and their managers, in three different work organisations. The research is designed as a panel study over four years, now in its second wave. The interviews were recorded and transcribed.

#### Results

Four general dimensions were identified relating to job design and organisation. In general, motivation to continue working were stimulated by a job that 1) would persist and match the competence of the worker; 2) allowed for social interaction and cooperation with colleagues; 3) challenged skills, allowed to apply experiences and opened for learning; and 4) had manageable workload and sufficient control over own work. Group characteristics apply, and job content and status were important for acceptance of relocations. Leadership and compensation added to this, as did specific job characteristics, own health, family and non-work activities.

#### Limitations

The study will need replications with large samples and quantitative methods.

#### Research/Practical Implications

The study provides bases for further research, and advices managers.

#### Originality/Value

The research is among the first to present interview-based findings in this area.

### **Correlates of work design and the intention to continue work in retirement**

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#### Purpose

Many countries are facing challenges due to demographic change. Decreasing old-age support ratios and skills shortages are just two of them. Continued employment after the entry to retirement could serve as one supporting factor in this situation. The purpose of this paper is to investigate the relation of work design on the intention to continue working for one's employer in retirement.

#### Design/Methodology

1128 employees of a logistics company in Germany aged 45 to 65 participated in the study. White-collar workers completed a web-survey and blue-collar employees completed paper-and-pencil questionnaires.

#### Results

Results of hierarchical regression analyses show significant positive relations between indicators of work organization, physical work environment, social work environment, and work demands, and the intention to continue working with one's employer in retirement.

#### Limitations

However, a major limitation of this study is the cross-sectional design, which does not allow for causal inferences. Also, not the actual behavior of work in retirement but only intentions could be measured.

#### Research/Practical Implications

The study's results extend the literature on determining factors of post-retirement work. Furthermore, practical implications for companies which could benefit from continued employment in retirement can be drawn. The results provide suggestions for human resource management and managers regarding

work design to motivate employees to stay in the workforce longer.

#### Originality/Value

To our knowledge, the study is the first to investigate the relation between different aspects of work design in a German sample of blue-collar and white-collar employees and the intention to continue working for one's employer in retirement.

## Job Transitions, Career and Employability in Europe

Session Chairs: *Claudia Bernhard-Oettel* (Stockholm Univ., SE) [cbl@psychology.su.se](mailto:cbl@psychology.su.se), *Erik Berntson* (Stockholm Univ., SE) [erik.berntson@psychology.su.se](mailto:erik.berntson@psychology.su.se), *Anneleen Forrier* (KU Leuven, BE) [Anneleen.Forrier@kuleuven.be](mailto:Anneleen.Forrier@kuleuven.be), *Nele De Cuyper* (KU Leuven, BE) [Nele.DeCuyper@ppw.kuleuven.be](mailto:Nele.DeCuyper@ppw.kuleuven.be)

Facilitator: *John Arnold* (Univ. of Sheffield, UK) [john.arnold@sheffield.ac.uk](mailto:john.arnold@sheffield.ac.uk)

#### State of the Art

This symposium consists of five presentations on job transitions, a meta-analysis and four empirical contributions from North, South, East and Central Europe. To date, research on job transitions is often situated either in the career or occupational health perspective. This symposium brings together research on job transitions related to employability, career, and well-being.

#### Contributions

Paper 1 provides meta-analytic evidence about key elements in career exploration, the collection of information relevant for employability. Paper 2 with data from Romania focuses on employability and organizational outcomes. Interestingly, results indicate that high employability perceptions can be harmful in terms of counterproductive behaviour and in situations of insecurity. Paper 3 focuses on lower educated workers from the Netherlands Working Conditions Cohort Study (NWCCS). It

establishes that changing jobs within a company is more likely than going somewhere else. This adds to the discussion on career, and employability. Paper 4 from Sweden studies employees who have to find new work after plant closure. It gives the rare opportunity to identify factors that help to maintain good well-being prior to forced job transitions and shows that employability is important. Paper 5 studies older unemployed in Portugal and their motivation for re-training to increase employability and return to work. This study adds knowledge to how older unemployed's intentions for re-training can be raised.

#### Research/Practical Implications

The presentations reveal new evidence from large samples and samples more vulnerable to job transitions (e.g. older workers, lower educated workers), and give important insights relevant to scientists and practitioners.

## Presentations of the Symposium

### Applying career exploration to social cognitive career theory: A meta-analysis

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#### Purpose

Research on career exploration (CE) –the collection of relevant information for the progress of one's career and thus a key component of employability and adaptability (Fugate, Kinicki, & Ashforth, 2004)– is very diverse. This causes three problems: 1. We don't know which constructs are really relevant for CE, 2. some results seem contradictory, and 3. we don't know the literature's strengths and blind spots. We aim at providing this overview, using Social Cognitive Career Theory (Lent, Brown, & Hackett, 1994) as a framework.



### Design/Methodology

We searched for literature on CE in PsycINFO and Web of Science using the search terms "career exploration", "vocational exploration" and "career curiosity". Relevant articles were meta-analyzed (Hunter & Schmidt, 2004; Lipsey & Wilson, 2011), correcting for sampling error and unreliability.

### Results

Results ( $3 \leq k \leq 23$ ) show significant estimated population correlations ( $.10 \leq r \leq .54$ ) for – among others– goals, self-efficacy, outcome expectations, openness to experience, conscientiousness, extraversion, locus of control, optimism, social support, and job satisfaction (concurrent measures). CE neither correlates significantly with career barriers, neuroticism and agreeableness, nor with job satisfaction and turnover intentions (employment outcomes).

### Limitations

Some population estimates are based on only few studies, limiting generalizability.

### Research/Practical Implications

For adolescents and adults, more research on outcomes of career exploration (and for adults also on predictors) is needed. Career counselors can now justifiably focus on relevant constructs like goal-setting and self-efficacy, saving their clients and themselves valuable time and resources.

### Originality/Value

This is the first comprehensive meta-analysis on career exploration, a core behavior recommended in career counseling.

## **The relationship between perceived employability and behavior at work: The moderating role of job insecurity**

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### Purpose

The current study aims to investigate how perceived employability (PE; individuals' perceptions of their chances of obtaining a new job) associates with different types of work-related behaviour, depending on the level of job insecurity. In particular, the objective is to test whether PE relates to more counterproductive behaviour, and reduced performance and organizational citizenship behaviour when workers experience job insecurity, thus exposing a 'dark side' to PE.

### Design/Methodology

469 Romanian employees participated in the study in 2012 by filling out a questionnaire. Hypotheses were tested using hierarchical regression analysis, controlling for age, function level and organizational size.

### Results

PE associated positively with performance and organizational citizenship behaviour in the condition of low job insecurity. However, these relationships were not significant among insecure workers. Interestingly, PE associated positively with counterproductive behaviour, regardless of the level of job insecurity.

### Limitations

The analyses are based on cross-sectional data, obtained from a single source (i.e. employee perceptions). Hence issues related to causality and common method variance pose a risk.

### Research/Practical Implications

There is a 'dark side' to PE in terms of counterproductive behaviour and in situations of insecurity. As such, measures aimed at stimulating workers' employability might have unwanted repercussions. Additional research could focus on how to reduce the negative 'side-effects' to PE.

### Originality/Value

This study is one of the first to focus on the possible downsides of employability, hence providing a more complete view of its correlates.

### Labour market transitions by lower educated workers

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### Purpose

This paper focuses on the question of the extent to which a greater transition mentality, operationalized as (dis)satisfaction with one's current job, and a greater transition capacity contribute to voluntary internal and/or external mobility among the lower educated.

### Design/Methodology

The research is based on data on 7,860 employees who participated in both 2007 and 2008 in the Netherlands Working Conditions Cohort Study (NWCCS) in the Netherlands.

### Results

It shows that dissatisfaction with specific job characteristics and transition capacity are poor predictors of external transition behaviour among the lower educated. However, the results confirm previous research that shows that the lower educated are primarily focused on the internal labour market within companies.

### Limitations

Further longitudinal research will be required in order to gain additional information on the question of the causes of this internal orientation and how external mobility and orientation towards other career opportunities may be increased.

### Research/Practical Implications

This research increases knowledge on lower educated workers' voluntary job changes and is informative for practitioners aiming at increasing these workers' career explorations outside their own company.

### Originality/Value

A vast amount of research shows significantly less voluntary job transitions among lower educated workers than among higher educated workers. All studies, however, stop at that point. We aim to also explain why this difference occurs and why it persists by looking at both the mentality and capacity for voluntarily making job and career transitions.

### Importance of incentives and sufficient information level for displaced worker well-being and attitudes during plant closure

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### Purpose

Downsizing and plant closures are becoming increasingly common when organizations reduce expenditure. Research has shown that large organizational changes are associated with stress and negative job satisfaction, but the consequences of plant closure on the displaced workers health and attitudes toward their employer is scarce. The study aims at investigating personal factors, such as optimism and employment history, as well as management strategies, such as information and incentives, and their influence on maintaining workers well-being and facilitating their development of new future personal and career-related goals. Another aim is to investigate how management strategies affect the workers attitudes toward their organization during the closure process.

### Design/Methodology

To test these hypotheses, questionnaires from 131 employees working for a Swedish plant that is closing down were collected.

### Results

Data was analysed by means of moderated hierarchical regression analysis with well-being, coping goal-construct, felt obligations, and withdrawals cognitions as the outcome variables. In a stepwise procedure, the impact of personal employment history, optimism, perceived employability and management strategies was analyzed. As assumed, associations between the outcome variables and management strategies (information, incentives) as well as personal factors (optimism) were found. Partly, employability acted as a moderator.

### Limitations

Cross-sectional data was used and only one plant was examined.

### Research/Practical Implications

Both information and action package could be positively influenced by management.

### Originality/Value

This is one of the few studies with the opportunity to study blue-collar workers during plant closure in order to identify important factors preparing successful job transitions.

### Individual predictors of the intention to enroll in education and training activities in a sample of senior unemployed adults

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### Purpose

Many senior unemployed show special vulnerabilities in the current labor market, and often this is related to educational deficits and

skills obsolescence requiring retraining. A better knowledge of psychological variables predicting their intention to (re)train appears to be relevant for the promotion of employability among senior unemployed individuals. Building on the expectancy-value theory and the literature on learning motivation, this study hypothesizes that age, education, length of unemployment, proactivity, learning orientation, employment commitment, learning self-efficacy, expected benefits from learning, perceived age discrimination and obsolescence, financial strain and perceived health associate with senior unemployed adults' intentions to attend training in the near future.

### Design/Methodology

This cross-sectional study compared a sample comprising 178 Portuguese unemployed senior adults not enrolled in training to a sample of 116 senior unemployed engaged in training.

### Results

Data is analysed during fall 2012, but preliminary results show that age, learning orientation, expected benefits from training and learning self-efficacy explain variance in the intention to attend a training course.

### Limitations

The cross-sectional design restricts firm conclusions about the predictive value of the studied variables in relation to the actual attendance of a training course.

### Research/Practical Implications

These results may be useful for practitioners in the design of interventions aiming to promote senior unemployed individuals' motivation to engage in (re)training.

### Originality/Value

To our knowledge, few studies have specifically investigated the motivation to attend a training course among senior unemployed individuals, who often are more reluctant to participate in education and training activities.

## Position Papers

### Age Differences in Motivation at Work: More Than Just Different Values

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#### State of the Art

An aging workforce and an increasing lack of qualified workers in many branches foster the need for a thorough understanding of age differences at work, providing reliable guidelines for age-differentiated job design and human resource management. In contrast to age differences in work-related skills and capabilities (e.g., Salthouse, 2012), age differences in work motivation are still rather neglected. However, maintaining high work motivation of all age groups, and in particular of older workers, is quite important both for the success of organizations and for the well-being of individual workers. For instance, high work motivation determines whether age-related deficits in capabilities are compensated by additional effort, in particular, when average as compared to maximum performance is considered.

#### New Perspective/Contribution

We provide a synthesis based on five new empirical studies (overall  $N = 2.083$ ), demonstrating age differences in work motivation at different levels of the motivational process. While recent research has already revealed systematic age differences in work values (e.g., Kooij, de Lange, Jansen, Kanfer, Dikkers, 2011) and overall ratings of work motivation (e.g., Ng & Feldman, 2010), we argue that chronological age may have additional and more complex effects on work motivation also at less conscious levels of motivational processes (e.g., implicit motives). Based on an

integrative framework that connects established motivation theories with life-span approaches, we postulate and empirically substantiate systematic age differences in work motivation both as main effects and as moderating conditions. The general idea applies Socio-emotional Selectivity Theory (Carstensen, 2006) to the work context, assuming that emotional well-being and meaningfulness at work become more important when workers grow older, and future time perspective at work decreases.

This basic assumption is illustrated in our empirical studies at various levels of motivational processes: First, after developing a new measure of work values that includes also values that might be of particular high importance for older workers (e.g., generativity), we showed that older workers indeed prioritize work values directed towards emotional well-being and the experience of meaningfulness at work (autonomy and generativity) in the “here and now.” Younger workers, on the other hand, emphasize work values directed towards learning and future development. Second, in addition to different work values, older workers emphasize goal orientation toward compensation and prevention of losses, trying to maintain the current status quo. Younger workers, in contrast, focus more strongly on striving for maximization and optimization, at least when they have sufficient work experiences. These results correspond to the model of selection, optimization and compensation of successful development over the lifespan (Baltes & Baltes, 1990). However, in case of generativity values, older workers reported even higher optimization orientations than younger workers, illustrating that the link between workers’ chronological age and goal orientation is not simple but qualified by time perspective and available resources of a worker. Third, going beyond simple main effects of chronological age, we examined age as potential moderator of affective conse-

quences of the relative fit between work values and job-characteristics (need-supply fit). Results showed that older workers reacted more negatively to misfits as compared to younger workers. Again consistent with Socio-emotional Selectivity Theory, workers with a shorter time perspective seem to react more sensitively to frustrations of their needs. Fourth, we further expanded our approach by also considering the congruency between explicit motives and implicit motives. Although congruency between explicit and implicit motives generally increased with age, older workers nevertheless reacted more negatively as younger workers when the congruency between explicit and implicit motives was low. This result is again in line with Socio-emotional Selectivity Theory, illustrating a higher need of older workers for congruency between (a) their explicit motives and their personality dispositions (i.e., implicit motives), and (b) between their explicit motives and environmental conditions (job characteristics).

#### Conclusion and Implications for Research/Practice

Together, these results illustrate that age differences in work motivation occur at different levels of motivational processes, but at the same time follow similar principles. Consistent with life-span theories, older workers not only consciously prioritize different work values than younger workers but also show different motivational orientations as a function of their future time perspective at work. Moreover, older workers also react more strongly to (lack of) congruency between consciously reflected explicit motives and both non-conscious personality dispositions (i.e., implicit motives) and environmental conditions (job characteristics). Thus, in order to retain older workers as highly motivated members of the workforce, organizations might not only consider that younger and older workers prioritize different work values. The relative fit between individual needs and external job characteristics seem to

become even more important with higher age and shorter time perspective at work. This result particularly highlights the importance of age-differentiated approaches of job design and human resource management. Of course, younger workers might also benefit from such differentiated concepts that consider individual needs and interests as basis of high satisfaction and motivation. Thus, implications of the current demographic changes are not restricted to older workers but might foster a general increase in humanization of work. This is additionally emphasized by psychological mechanisms underlying the observed age differences at work, which were also addressed in our studies. Specifically, observed age differences were often not contingent on chronological age per se, but were explained by associated psychological processes such as future time perspectives at work. These insights have important implications also for practitioners because they enable the development of general strategies to decrease or even disable aging effects. If age differences, for example, are caused by contingent differences in future work time perspective, widening the future work time perspective of older workers – for instance, by offering to continue working on a self-employed basis after retirement – might substantially reduce age differences.

#### Single Papers

##### **Incongruence among employed and unemployed persons with diverging preferences for work and non-work**

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#### Purpose

The incongruence-model (Paul & Moser, 2006) explains the negative psychological effects of unemployment by a lack of congruence



between an individual's work-related values and goals and his or her actual employment situation. The purpose of the study was to test important aspects of this model.

#### Design/Methodology

Cross-sectional sample of 219 unemployed and 194 full-time employed people.

#### Results

Unemployed persons reported considerably more incongruence than employed persons ( $d = 2.22$ ;  $p > .001$ ). Incongruence was correlated to distress ( $r = .40$ ;  $p > .001$ ) and life satisfaction ( $r = -.55$ ,  $p > .001$ ). Incongruence mediated the effects of unemployment on distress ( $p < .01$ ) and life satisfaction ( $p < .001$ ). Three Subgroups deserving further attention were identified: (A) Dependent workers (15% of all employed persons) who would prefer being self-employed (characterized by high incongruence, no mental health problems). (B) Workers (5%) preferring a position outside the labor market (high incongruence, low life satisfaction, high distress). (C) Unemployed persons (3%) preferring being unemployed to having work (low incongruence, low distress, high life satisfaction).

#### Limitations

The incongruence model still needs to be tested with a longitudinal design.

#### Research/Practical Implications

The incongruence model helps to explain the frequently demonstrated mental health problems of unemployed persons and could form the basis of successful intervention programs.

#### Originality/Value

Test of the incongruence model with a specifically designed scale. The psychologically interesting subgroups of employed and unemployed persons have not been described yet.

### **Effects of re-employment and prolonged unemployment on well-being, work motivation and perceived employability of young and middle aged job losers**

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#### Purpose

The aim of the study was to look further on the effects of re-employment and prolonged unemployment on young (age < 35;  $M=26$ ;  $SD=4.5$ ) and middle-aged (age 35+;  $M=46$ ;  $SD=6.4$ ) persons.

#### Design/Methodology

A follow-up study with two waves of data-collecting (second wave after 6 months) was conducted on a convenient sample ( $N=274$ ) of persons of various demographic and work characteristics who recently lost their jobs and became unemployed. Several variables were in the focus: financial strain, core self-evaluation, social support, job valuation and job-search efficacy.

#### Results

The results show that younger people were more often re-employed in the follow up, but no differences were found in qualification-job fit and job satisfaction between two age groups. Middle aged persons were more often unemployed after six months. The results of 2x2x2 repeated measures ANCOVAs generally proved a negative impact of unemployment on both groups, but negative effects of unemployment were more evident among older people and positive impacts of re-employment were more evident among younger people.

#### Limitations

Two limitations of used methodology must be taken into account while observing the results: (1) The convenient sample of unemployed persons which was not totally homogeneous in length of unemployment after job loss, as well as in duration of re-



employment status; (2) The broad age categories that were observed.

#### Research/Practical Implications

Necessity of age sensitive approach to the effects of job loss and unemployment on well-being and work motivation will be discussed.

#### Originality/Value

The study offers new longitudinal data on the individual capacities that are related to employability and well-being of people of different ages.

### **Quality of education and new entrants' job search intensity: the mediating role of self-efficacy**

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#### Purpose

Early job search experiences have a critical role in shaping subsequent career transitions. Accordingly, a stream of research has focused on better understanding how individuals seek out employment after a period of education. However, recent reviews on the topic have stressed the need for more research on the differences in job search behaviour (i.e., intensity) based on the quality of the education received. Building on the Theory of Planned Behavior, we hypothesized that the relationship between quality of education and job search intensity is mediated by self-efficacy, so that quality of education is positively related to self-efficacy, which in turn is positively related to job search intensity.

#### Design/Methodology

The study sample consisted of a total of 147 college graduates seeking their first job after graduation. The proposed model was tested

by means of SEM techniques using LISREL 8.80.

#### Results

The results obtained supported our hypotheses. The relationship between quality of education and job search intensity was fully mediated by self-efficacy, so that quality of education was positively related to self-efficacy, and the latter was positively related to job search intensity.

#### Limitations

It remains to be tested the extent to which our results generalize to other variety of new entrants other than college graduates.

#### Research/Practical Implications

Theoretically, this study sheds light on the mechanisms linking quality of education and job search intensity. From a practical point of view, disentangling these mechanisms suggest ways of enhancing new entrants' engagement in specific job search preparations and/or activities.

### **Do they adapt or react? A comparison of the adaptation model and the stress reaction model among South African unemployed**

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#### Purpose

Recently, De Witte, Hooge and Vanbelle (2010) found that long-term unemployed in Belgium showed more positive affective experiences, less employment commitment and less job application behavior as compared to short-term unemployed. These results align

with the 'adaptation hypothesis' (Warr & Jackson, 1987); to protect themselves against the negative consequences of prolonged unemployment reflected in negative affective experiences, long-term unemployed lower their employment commitment and job application behavior. The current study aims to replicate these findings in South Africa. We hypothesize that South African long-term and very long-term unemployed (compared to the short-term unemployed) show more positive affective experience, lower employment commitment and lower job application behavior.

#### Design/Methodology

Short-term (N = 101), long-term (N = 152) and very long-term (N = 119) unemployed from the Potchefstroom area in South Africa completed the Experience of Unemployment Questionnaire (De Witte et al., 2010).

#### Results

Multivariate analysis of variance (polynomial contrast) revealed no significant differences between short-term and long-term/very long-term unemployed on affective experience, employment commitment and job application behavior.

#### Limitations

Our results are based on cross-sectional data. Future studies could enhance insight in the situation of South African unemployed by applying a longitudinal design.

#### Research/Practical Implications

The adaptation hypothesis was not confirmed amongst South African unemployed. This underlines the need to strengthen the coping strategies of South African long-term/very-long term unemployed to protect them against the negative consequences of long-term unemployment.

#### Originality/Value

This is the first study to date that investigated adaptation to unemployment in South Africa.

### **Ease of entry into the graduate labour market: Perceived employability of graduates from non-professional degree courses**

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#### Purpose

There is now increasing evidence that graduates from non-professional degree courses are highly likely to be underemployed upon graduation. This contradicts the 'knowledge economy' thesis that creative industries are the driving forces of future of work. Based on this rationale, this paper examines the role of degree subject studied at university on graduate employability. It hypothesises a conditional role for degree subject on the relationship between self-esteem, career self-management (CSM; career exploration, job search, networking and guidance seeking) and perceived employability amongst new university graduates in the UK.

#### Design/Methodology

A mixed methods design was used. This involved survey data from two graduating cohorts in the UK (N=433) and in-depth interviews with graduates from non-professional and business related courses (N=37). Survey data was analysed using moderated mediation analysis technique (Hayes & Preacher, in review; Hayes, under contract) and a career history analysis was conducted on the interview data.

#### Results

Findings suggest that self-esteem indirectly predicts perceived employability via job search and guidance seeking. This relationship is conditional on degree subject, such that job

search and guidance seeking resulted in lower perceptions of employability amongst graduates from non-professional degree courses. Interview data suggests this is due to lack of perceived career routes.

#### Limitations

A major limitation of this study is its use of cross-sectional survey data.

#### Research/Practical Implications

The findings have further extend the vocational psychology research on CSM by demonstrating the conditional effect of degree subject and provide avenues for intervention by career advisors.

#### Originality/Value

This research brings together vocational and organisational psychology perspectives to the study of graduate employability.

### **Career anchors of professional pharmacists: Testing Schein's theory**

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#### Purpose

Schein's concept of career anchors has provided one of the most influential frameworks for analysing career preferences. There has been extensive research that has confirmed the presence of some or all of these anchors in a variety of populations. There has also been research showing an association between career anchors, compatible features of a job and job and career satisfaction, reflecting the utility of career anchors to explore person-environment fit. Moreover, looking beyond his classification, Schein also offered a broader theory about the origins, development, stability and prioritisation of career anchors that has considerable implications for the way in which they are likely to affect a range of outcomes. Yet his theory has rarely been systematically analysed and tested. The

aim of this paper is also to rectify this omission by providing a test of all the elements in Schein's theory of career anchors.

#### Design/Methodology

We have used validated measures to test Schein's theory among a sample of 1400 professional workers in the UK.

#### Results

Results indicate that in contrast to Schein's assumptions career anchors are influenced by family and previous career aspirations and do not necessarily mature in the early career stages; people can have multiple anchors; and anchors are flexible and adaptable to people's work and life circumstances.

#### Limitations

The study is limited by its cross-sectional research design.

#### Research/Practical Implications

The study contributes to assessing the usefulness of Schein's theory to capture the subjective side of career.

#### Originality/Value

This is the first study providing a systematic test of Schein's theory of career anchors.

### **Counting the cost of a bit of respect for women's pay and workplace attitudes: Linking gender, pay, procedural justice, and related attitudes using WERS 2004**

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#### Purpose

Recent research suggests that managers stereotypically assume women place more value than men on interpersonally just treatment, and given this, they are more likely to substitute interpersonal justice for pay for women than for men when making pay allocations (Belliveau, 2011). Such actions may create

distributive injustice for women. This provocative research has, however, yet to be confirmed from the employees' perspective (i.e., whether women psychologically substitute interpersonal justice for lower pay).

#### Design/Methodology

We use the Workplace Employment Relations Survey (2002; N = 22,000 employees from over 1700 workplaces), a nationally representative survey of British workplaces.

#### Results

After controlling for individual and establishment factors, we find evidence that women are paid less than men, yet their satisfaction with pay is higher than men, and our results support a substitutability effect where interpersonal justice is negatively associated with pay for women but not for men. Furthermore, women are less likely to react (in terms of lowered organizational commitment) to pay dissatisfaction than men.

#### Limitations

Data cross-sectional and self-report.

#### Research/Practical Implications

Findings may partly explain the so-called gender paradox – where women typically receive less pay than men but report higher satisfaction – given that interpersonal justice is more likely to be associated with lower pay for women than men and also has well-established relationships with job satisfaction and other workplace attitudes. The findings also highlight a 'dark side' to justice.

#### Originality/Value

The first study to show the substitutability effect of interpersonal justice for pay and pay satisfaction holds more strongly for women than men.

## Is demotion the HR-solution for the future?

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#### Purpose

The participation of older workers in Europe, and more specific in Belgium, is very low. To encourage firms to keep their over-45s in employment, the Belgian Government has obliged firms with more than 20 employees to draw up an employment plan. One of the suggested measures is "demotion". The economic crisis forces firms more than ever to put the right man on the right place. In the light of cost-effectiveness demotion can be the right tool to do so. But employers aren't keen on applying demotion, amongst others caused by salary effects. There is very little empirical research on motives and effects of demotion (Hall & Isabella, 1985). The existing research limits itself to the consequences for the employee.

Literature learns that there are different kinds of demotion with different features. Ng, Sorensen, Eby & Feldman (2007) set up a typology for transitions, but applied to demotion this typology isn't complete.

#### Design/Methodology

Through an online questionnaire Belgian HR-managers (N=150) were surveyed on the typology, the objectives of the decision for demoting and the consequences of demotion.

#### Results

Cronbach's Alpha and factor analysis were used to analyze the data.

#### Limitations

To gain insights into the motivation of the application of demotion the questionnaire should be followed by focus groups.

#### Research/Practical Implications

For the moment only preliminary results are available.

**Originality/Value**

To our knowledge, this research is the first to be conducted from the perspective of the employer.

**Active ageing in work and retirement**

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**Purpose**

Participation may, according to the SOC-theory (Baltes & Baltes 1990), be maintained in high ages by selection, optimization and compensation mechanisms. Seniors who select to remain in the workforce may need to deselect other activities, while seniors retiring may expand their other activities. Both strategies may support active ageing. In this study we explore the changes in activities outside work among older workers compared to same age seniors who retire.

**Design/Methodology**

Data are from the NorLAG panel study. Of 505 gainfully employed persons 56 years and older in 2002, 210 had retired by 2007. Data were collected through interviews, questionnaires and registry linkages. Changes were measured by comparing activity in 21 different areas in 2002 versus 2007. The response rate was 57%. Analyses are done separately for optional early retirement and ordinary old age retirement.

**Results**

Seniors continuing working restrict their household activities, while those retiring expand such activities. Those retiring early tend to increase their assistance to others to some extent.

**Limitations**

Low Ns in some categories limits the opportunities of analyzing effects of covariates, e.g.

the possible effects of part time work and gradual retirement.

**Research/Practical Implications**

Since retirement mainly involves a retreat to the home, policy may promote seniors' contributions to society best by facilitating active ageing through gainful employment, alternatively by stimulating voluntary contributions from retirees.

**Originality/Value**

This is a unique panel study comparing increases and decreases in a wide range of activities among seniors continuing working and seniors retiring.

**Vocational interests and unemployment of youngsters**

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**Purpose**

Children's interests are created between 11 and 12 according to Lewis theory of vocational choice. They should be impacted by external influence. A huge unemployment on EU labor market is the consequence of unbalance between labor market demands and youngsters' vocational structure.

**Methodology**

Whole generation (60 pupils) from selected school in the age of 11-12 listed their professional interests (max 5 professions ranked). Before the implementation of questioner appearance of professions were followed up for one month in the media (positive and negative appearance).

**Results**

Children selected desirable vocations: physics, engineer, cook, manager, layer, actor, journalist, musician, singer, physician, coach, football player, fireman, soldier, detective, and rescuer. Undesired vocations were: worker,

plumber, dustman, housekeeper, carpenter, mechanic, backer, farmer, merchant, innkeeper, politician, priest, accountant, and guardian. There was a strong positive correlation between children's vocational interests and professions' positive presentation in media (0.65).

#### Limitation

Results should be tested in other countries and in other social environments.

#### Practical Implications

Positive presentation of professions in media shapes vocational interest of children. Negative presentation of professions in media causes strong aversion towards these professions among children. To archive balance on the labor market positive presentations of future promising vocations, with possible high added value is an intervention on the future labor market. It is possible to shape children's interests in the age about 12 to develop interest for prospective future vocations and to reduce unemployment of future youngsters.

#### Value

The study is the first of its kind in Slovenia.

### **The influence of education-job match on university graduates' job quality. A longitudinal study**

#### ***Nominee of the EAWOP Congress 2013 Best Paper Award***

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#### Purpose

Research shows that education-job match upon entry into the labour market have positive consequences for later adult career outcomes. Although career mobility and job mat-

ching theories state that education-job mismatch at early career is temporary, it has negative effects on labour outcomes over time. Considering this, the general purpose of this study was to analyze the longitudinal effect of the initial education-job match on both the education-job match and job quality indicators six years after graduation.

The specific aims of the current study were: firstly, to test the relationship between education-job match (vertical and horizontal match) on the first job after graduation and the education-job match six years after graduation; secondly, to test the relationship between education-job match six years after graduation and job-quality indicators (income, hierarchical status, and job satisfaction); and finally, to test the mediating role of education-job match six years after graduation in the relationship between initial education-job match and job quality six years after graduation.

#### Design/Methodology

These aims were addressed using a longitudinal sample of 301 Spanish graduates.

#### Results

The regression results showed that vertical match six years after graduation mediates the relationship between initial vertical match and all job quality indicators. Moreover, horizontal match mediates the relationship between initial education-job match indicators and hierarchical status six years after graduation.

#### Research/Practical Implications

Our results show diverse implications for job-education match models.



## Posters

### How to reduce intention to leave: Exploring proximal and distal antecedents

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#### Purpose

This research aims to understand the mediating role of job satisfaction and organizational commitment on the relationship between collaboration and intention to leave.

#### Design/Methodology

337 employees from a large Canadian financial institution answered four self-reported questionnaires measuring collaboration (Chiocchio et al., 2012;  $\alpha = .89$ ), job satisfaction (Carrier, 1993;  $\alpha = .78$ ), organizational commitment (Mowday, Porter, & Steers, 1982;  $\alpha = .85$ ) and intention to leave (Deschamps, 1996;  $\alpha = .68$ ).

#### Results

Multivariate mediation analyses (Hayes & Preacher, 2011) indicate that job satisfaction fully mediates the relationship between collaboration and intention to leave, after controlling for gender, age and annual salary ( $-.11$  CI 95% [-0.22 – -0.03]). This model explains 10% of the job satisfaction's influence on the intention to leave ( $F[6, 289] = 6.44, p < .05$ ). Organizational commitment is not a statistically significant mediator ( $-.09$  CI 95% [-0.21 – 0.01]).

#### Limitations

By focusing on perceptions of collaboration, the study was conducted at the individual level. Data were drawn from a single organization.

#### Research/Practical Implications

Perceptions of collaboration point to concrete team behaviours such as communication, syn-

chronicity and coordination that can be leveraged against turnover intent. For example, this can be achieved by focusing on team training (Salas et al., 2008), or engaging in team building activities (Klein et al. 2009).

#### Originality/Value

This study proposes a clearer view of processes at work between distal antecedents, proximal antecedents, and intention to leave. While the focus remains mostly on how to prevent job dissatisfaction, our results suggest ways to enhance job satisfaction, through collaboration as a lever against turnover intent.

### Work stress assessment of patients following angioplasty or heart surgery: Results of 1 year follow-up study

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#### Purpose

The aim of this prospective study was to investigate the work stress perception in a sample of patients who returned to work after multidisciplinary cardiac rehabilitation (CR) for coronary angioplasty or cardiac surgery.

#### Design/Methodology

A sample of 122 consecutive patients was evaluated at baseline during the cardiac rehabilitation and at 6 and 12 months after the hospital discharge. Work stress perception was measured by the Occupational Stress Indicator (OSI).

#### Results

Results showed a significant improvement in mental ( $F=6.78; p < 0.001$ ) and physical health ( $F=9.54; p < 0.001$ ). Patients revealed a decrease in Type A behaviour pattern ( $F=9.79; p < 0.001$ ) and in job satisfaction levels ( $F=4.21; p = 0.01$ ) and perceived greater internal locus of control ( $F=5.52; p < 0.01$ ).

### Limitations

This study did not include a control group of patients who did not attend cardiac rehabilitation program.

### Research/Practical Implications

The work stress assessment should be included as a primary focus of the CR programs already during hospitalization because allow to identify patients' psychological and work-related barriers and to orient interventions aimed at facilitating a successful and safe return to work.

### Originality/Value

This is one of the few studies which explored work stress perception during the work reintegration process after cardiac intervention.

## **Influence of job characteristics on an early return to work after a cardiac event**

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### Purpose

An early return to work (RTW) is an important goal in cardiac rehabilitation since the more a worker is absent from work the more is the probability to not return to work. RTW after a cardiac event is influenced also by psychosocial factors. Despite this, few studies explore the relations between job characteristics as perceived slightly after the cardiac event and RTW duration. We hypothesized that an early RTW (less than 12 weeks) is predicted by Job Satisfaction, Psychological Job Demand (PJD), Co-worker Support and Depression.

### Design/Methodology

To test this assumption, we measured the psychosocial dimensions at the beginning of the cardiac rehabilitation process of 51 workers and the subsequent RTW duration.

### Results

Multiple logistic regression supported that only PJD significantly predict early RTW. Specifically, the more the PJD was before the cardiac event the less likely is an early RTW (OR, 0.13; 95% CI [0.028, 0.592]).

### Limitations

The study have a relatively small number of subjects and the assessment of the job characteristics might have been influenced by the shortly happened cardiac event.

### Research/Practical Implications

These results imply that a work environment with an high PJD promotes a lengthening in the RTW of workers after a cardiac event.

### Originality/Value

To our knowledge, few studies in this field have the power of a longitudinal design. Moreover, our results highlights the usefulness and necessity of other researches on the topic of the relation between work conditions and RTW after a disease period.

## **Low sickness absence in organization- does it reflect recruitment**

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### Purpose

Low average sickness absence at work places is used as an indicator of healthy working conditions. Work places with low sickness absence are regarded as good models. However, average sickness absence may also reflect the extent of which disabled are recruited. The purpose is to study if history of sickness absence among recruits is associated

with average sickness absence at the work place.

#### Design/Methodology

In a longitudinal register-based study, Swedish work places with at least five employees were chosen (approximately 130 000 work places with 3,5 million employees). New employees were categorized according to days on sick leave the year before recruitment. Average age, education, sector and gender composition at the work places were used as confounders.

#### Results

The likelihood to recruit an individual with earlier sickness absence increased with increased average sickness absence at the work place. In 2006, The OR that a work place with an average sickness absence above 29 days (compared to 0 days), to recruit an employee with more than 180 days on sick leave the year before was 22 (18;28) (females) and 24 (19;29) (males).

#### Limitations

The present study does not reveal why work places differ in recruiting people with experience of long term sickness.

#### Research/Practical Implications

The results implicate a call for carefulness in regarding work places with low sickness absence as "good". Also, average sickness absence at the work place could be considered in vocational rehabilitation when supporting return-to-work.

#### Originality/Value

To our knowledge there are no previous studies of this association.

### **Competencies Centre – Multidimensional identification of competencies and providing support to the unemployed**

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#### Purpose

An alarmingly growing unemployment rate calls for implementing new services offered by labour offices targeted at better identification of fit between one's competencies and jobs offered on the market. The aim of the project is to broaden the scope of support by introducing Competencies Centre, responsible for multidimensional practical identification of competencies with regard to professional role. It will also provide motivational support to the unemployed. Consequently, these actions will enable creating personal development plans.

The project was financed by European Social Funds and conducted in partnership between universities and labour offices.

#### Design/Methodology

Designing the model involved:

1. conducting qualitative and quantitative research investigating demand for such services among employment officers, people currently unemployed and hypothetical employers
2. creating list of competencies and their indicators
3. assigning competencies to roles derived from Holland's typology
4. devising assessment-centre-like tasks to identify levels of competencies

### Results

The studies accounted for growing importance of practical verification of competencies. As a result, competencies model was created, consisting of 26 professional roles and competencies assigned to each of them by employees, employers and panel of experts. For each role a set of tasks was designed to enable observation and measurement of competencies.

### Limitations

The project will undergo test phase that will last until March 2015, so its short- and long-term consequences are yet to be observed.

### Research/Practical Implications

Competencies Centre will be implemented in employment services in Gdańsk region (Poland).

### Originality/Value

Competencies Centre will be the first state-governed multidimensional and systematic approach to measure competencies in Poland. It will enable creating personal development plans adjusted to individual needs.

### **Does financial hardship explain differences between Belgian and South African unemployed regarding experiences of unemployment, employment commitment and job search behaviour?**

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### Purpose

Although research indicates that access to financial resources may have serious consequences for the way unemployed people cope with unemployment (Mohr & Otto, 2011), any form of unemployment insurance system targeted at the South African unemployed is mis-

sing (Klasen & Woolard, 2008). The aim of this study was to investigate whether country of residence indirectly influenced unemployed people's affective experiences (experiences of unemployment), attitudes (employment commitment), and behaviour (job search behaviour) via financial hardship.

### Design/Methodology

Unemployed people from the Potchefstroom area in South Africa (N = 381) and the Brussels area in Belgium (N = 305) completed the Experience of Unemployment Questionnaire (De Witte et al., 2010).

### Results

Mediation analyses as suggested by Preacher and Hayes (Hayes & Preacher, 2008) revealed that country of residence indirectly impacted on experiences, attitudes, and behaviour of the unemployed via financial hardship. While South African unemployed experienced more financial hardship as compared to Belgian unemployed, they also experienced their unemployment as more negative, were more committed towards employment and displayed more job search behaviour.

### Limitations

The cross-sectional study design limits the scope of our conclusions.

### Research/Practical Implications

These results support the need for the set up of a South African state support system in order to cushion the negative effects of unemployment.

### Originality/Value

To our knowledge, this is the first study comparing the consequences of unemployment across countries with a well-developed (i.e., Belgium) and missing (i.e., South Africa) unemployment state support system.

### Meaning of work and job search behaviour: An explorative study on unemployed workers.

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#### Purpose

Most of past research on job search has focused on the relationship between individual strategies and the perceived quality of re-employment, focusing mostly on effort and intensity of job search behavior during unemployment (Blau, 1994; Kohen, 2010). Few studies (for instance, Depolo, Sarchielli; 1987;1991) have investigated the meaning of work and job search behavior during unemployment. The aim of this paper was to explore the meaning of work in a sample of unemployed workers, considering their job search behavior.

#### Methodology

Data have been gathered through the public Employment Agencies. Participants (N = 300) were unemployed people living the South of Italy; they were invited to fill in a questionnaire composed by the scales of the Meaning of Work protocol (MOW, 1987) and by the Job Search Behavior Scale (Blau, 1993;1994).

#### Results

Meaning of work was found out to be positively related to proactive job search behavior.

#### Limitations

Limitations of the study were linked to the sampling procedure which was a convenience one and with the different measures used, likert scales, ranking procedures, etc.

#### Research/Practical Implications

Future research could focus on the relationship between meaning of work, professional commitment, job search behavior and the perceived quality of re-employment.

#### Originality/Value

This study contributed to investigate the construct of unemployment and its psychological implications. Though largely neglected - at least in the Italian context- such variable has gained a new meaning in the present labor market characterized by growing flexibility.

### The work of the tourist guide

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#### Purpose

The work of tourist guide has been forgotten by labour researchers. This research addresses: How are tourists guides' work being organised, and what are their employment and working conditions? The unique background of this research is the increasing importance of tourist guides work because of increase in tourism in general, and especially from the BRICS countries. Guides may be the only "native" person a tourist meets when visiting, and their role as informal educators may be significant, for instance regarding intercultural understanding in times of intercultural conflicts, and the understanding of sustainability in times of climate change challenges.

#### Design/Methodology

Focus group interviews, lasting 100 to 150 minutes, were made with tourist guides, managers and tour operators in Hungary, Malta, Catalonia and Norway. Moreover, a questionnaire study mainly based on QPS Nordic-ADW was applied to guides in Catalonia (n= 221) and Norway (n=111 ).

#### Results

Work organising and working conditions vary across countries with regards to licencing, training, contracts and working conditions. Independence, self-employment and individu-

al contracts and part-time work are most typical. Average age is high in Norway, and the job is appropriate as part-time for students and “bridging” employment for older people. Job satisfaction is high.

#### Limitations

The study will need replications with larger samples from several countries.

#### Research/Practical Implications

The study provides bases for further research, and advises organisations responsible for tourists guiding.

#### Originality/Value

Previously, tourism research has addressed tourist guides’ roles, but to the best of our knowledge, no research has focused tourist guides from organisational, ageing workforce and working conditions points of view.

### **Unemployed individuals’ work values and life satisfaction: A descriptive study**

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#### Purpos

The present research examines the connection between unemployed individuals’ employment value and their general life satisfaction.

#### Design/Methodology

Employment value was assessed with the help of 14-item scale (Feather, 1990), life satisfaction was measured with the four items from 1 (completely satisfied) to 4 (absolutely dissatisfied). We also collected some demographic information about our participants (321 unemployed individuals).

#### Results

In line with our hypothesis the results obtained showed that general employment value was negatively related to life satisfaction. The

more unemployed individuals value being employed the less they are satisfied with their life. The unemployed, who highly appreciate employment, focus their vital purposes and values on labor employment. That's why the mentioned purposes and values are destroyed when job is lost. In comparison with them, unemployed people with rather low indicators of the importance of employment distribute the purposes and values in different spheres of their life, consequently they keep on their basic vital purposes and values in a situation of job loss.

#### Limitations

In our investigation we didn’t take into account qualitatively different types of unemployed individuals’ work value orientation (e.g. intrinsic or extrinsic), that might help to understand more profoundly how work values are related with life satisfaction.

#### Research/Practical Implications

The results of this research are used in our training work with unemployed people as well as in individual work with them.

#### Originality/Value

Our research enabled us to understand some peculiarities of people’s experience and feelings in the situation of job loss and some factors stipulating them as well.

### **Difficulties concerning career decision making among youth in Poland**

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#### Purpose

In current times the rate of change of work, its nature, technology, labor market (Raven 2004, Bauman, 2006) and changes in the education make the vocational decision to very difficult (Heckhausen and Tomasik, 2002). An important condition conducive to professional success is to make an informed decisions (Sa-



vickas, 1999). However, much of the youth do not take it (Bank, 2006, Germejis, Boeck, 2002) and it is crucial to find the reasons of the phenomena.

#### Design/Methodology

We conducted a set of two research in one year distance. In the first one 2800 Ss took part, the second one involved 2650 students of the senior year from secondary schools, high schools and Universities were investigated. Questionnaire included 13 scales on various difficulties of making vocational decision (Bank, 2006, Gati, 2008, Germejis, Boeck, 2002). The collected data were analysed with explore factor analyses and the received factor structure was confirmed in subsequent studies using confirmatory factor analysis.

#### Results

The results show that the difficulties of decision-making are arranged in three groups. Confirmatory factor analysis allowed to point out the consequences of the choice of different structures of the phenomenon.

In next research it should be included more possible difficulties.

Discovered structure of barriers is useful tool for vocational advisors it is different than described in previous research (Gati, 2001, Osipow, Carney, Jones & Chenery 1980, Chartrand & Robbins 1997, Dickinson i Tokar, 2004). The novelty is adding time management as a reason of indecisions.

### **The influence of HR practices on engagement and the intention to continue to work among older employees**

*René Schalk (Tilburg Univ., NL) [m.j.d.schalk@uvt.nl](mailto:m.j.d.schalk@uvt.nl),  
Marijn van IJsel Smits (Tilburg Univ., NL)*

#### Purpose

The aim of this study was to examine whether perceived HR practices for older workers were

related to employee engagement and the intention to continue to work.

#### Design/Methodology

In two samples (296 50+ employees employed in three organizations and 135 50+ employees employed in various sectors) data was collected on perceived HR practices, the intention to continue to work, and engagement.

#### Results

In the first sample, perceived HR practices were positively related to engagement and the intention to continue working.

In the second sample, it was found that specific HR practices were related to engagement and the intention to continue to work.

#### Limitations

Cross sectional study; focus on 50-plus employees.

#### Research/Practical Implications

HR Practices impact engagement and intention to continue to work. There are differences in this respect between HR practices.

#### Originality/Value

HR practices do matter. They are largely neglected in current research, however. The results have implications for practice.

### **Social representations of retirement in Russia**

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#### Purpose

The aim of this study was to explore some peculiarities in social representations of retirement in the various strata of the Russian society.

### Design/Methodology

We investigated social representations of retirement across three social groups: students (N=46), people in the work-force (N=34), and retirees (N=36). The content of social representations of retirement was assessed through a free association task with the stimulus word "retirement" (Roland-Levy & Berjot, 2009).

### Results

We have revealed substantial differences in social representations of retirement in our three samples. One of them was that retirees' representations were the most pessimistic among others; they were associated with diseases, poor financial conditions and loneliness. Their only optimistic association concerns their being grandmothers/grandfathers.

### Limitations

Our sample included three groups of different employment status (totally 116 participants). These groups were not homogeneous in age, educational level and income. Therefore differences we obtained in our groups might be stipulated not only by employment status but partly by the abovementioned factors as well.

### Research/Practical Implications

We use the results of this and similar investigations in our psychological course of lectures to retirees at the Third Age University. We also think that findings of such investigations shall provide productive ideas for decision makers especially in the field of pension policy.

### Originality/Value

In this study we have exposed and described social representations of retirement pertinent to various strata of the Russian society.

## How can the immediate supervisor contribute to the successful return to work of employees diagnosed with depression?

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### Purpose.

The objective of this study is to evaluate the role of the Immediate Supervisor's (IS) on the return to work of employees diagnosed with depression.

### Design/Methodology

This study, currently under way in Quebec (Canada), includes a mixed design. Telephone interviews (adapted by Nieuwenhuijsen et al., 2004) were conducted with the IS of employees having been absent from work due to depression. In addition, the Work Accommodations Inventory (Corbière & Ptasinsky, 2004) was submitted to the IS.

### Results

Of the 52 respondents, 60% were women, mostly senior executives or department heads, working in the public sector in a very large company. Results showed that the IS' attitudes of stigmatization were low (Social Distance: M=1.30; Stereotypes: M=1.91) and the IS' intentions to facilitate the employee's RTW were high (M=4.22). The most part of ISs (75%) had stayed in contact with the employee during the absence. These contacts

were carried out mostly by telephone (80%) and focused mainly on the health of the employee (77%). Almost 100% of ISs reported having implemented specific work accommodation to help the RTW of employees diagnosed with depression (e.g., gradually introduction of tasks).

#### Limitations

The small sample size may result in limited data to study why IS have adopted certain behaviours during the employee's RTW.

#### Research/Practical Implications

The results are useful to develop concrete action plans to promote the RTW of people diagnosed with depression, and thus contribute to their recovery.

#### Originality/Value

These results let identify the main factors facilitating the RTW in a specific population.

### **University graduates with disabilities: A regional study on the transition from higher education into employment in times of an aging workforce**

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#### Purpose

Managing transitions from one stage in life to another is challenging, especially when facing additional stress (Beelmann, 2011; Bronfenbrenner, 1980). Looking at the employment situation of university graduates with disabilities in Germany, a lack of inclusion can be detected (Federal Employment Agency, 2011). Which barriers hinder the transition process? This study explores the situation in the Cologne-Bonn region from several perspectives. Disabled graduates, support agencies and services as well as employers are asked to describe barriers and opportunities from their

point of view to allow the deduction of interventions.

#### Design/Methodology

Semi-structured expert interviews (N = 15) and a future workshop (N = 30) with stakeholders from the field are conducted. Regional supportive structures are analysed.

#### Results

Despite versatile barriers university students with disabilities are highly motivated and often achieve excellent marks. Their handicap on the job market results from other factors: on the one hand disadvantages in their qualification profile, e.g. fewer opportunities for networking or spending time abroad; on the other hand psychological barriers, caused by insecurities and lack of information.

#### Limitations

As this is a regional exploratory study, the generalisation of the results to other contexts is questionable.

#### Research/Practical Implications

Due to skills shortage resulting from demographic changes and the requirements of the UN Disability Convention, there is an increased interest in full inclusion of people with disabilities. Thus, the identification of transition barriers for university graduates with disabilities is inevitable.

#### Originality/Value

While many studies in Germany look at inclusion of lower-skilled people with disabilities, the research on university graduates is scarce.



# 11. Technology at work and human-machine-systems

## Symposia

### Traffic Psychology: Improving Safety and Enhancing Mobility

*Session Chair: Mark Vollrath (TU Braunschweig)*  
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#### State of the Art

Traffic psychology deals with the study of the behavior of traffic participants users and the psychological processes underlying that behavior. As an applied science, the aim is on the one hand to increase safety and prevent accidents. On the other hand, it targets an improved and enhanced mobility especially for groups of user with respective restrictions (e.g., older drivers, blind or handicapped persons). According to these aims, the session comprises on the one hand research to develop driver assistances systems and infrastructure based systems which should prevent driver errors. On the other hand, it is examined how new information technologies like smartphones can be used to aid blind people when walking through town. Both aspects have in common that they use psychological models in order to develop the respective assistance.

#### New Perspective/Contribution

New technologies provide the opportunity to increase traffic safety and mobility. However, the needs and characteristics of the users have to be taken into account in the develop-

ment as this is crucial for an effective human-machine interaction. Thus, the research presented here contributes to a new understanding of how traffic participants may be best supported by technical means.

#### Conclusion and Implications for Research/Practice

The research contributes to an increased traffic safety and mobility of certain user groups.

## Presentations of the Symposium

### “Stop, wait a bit!” How to support blind people when crossing an intersection

*Stefanie Struck (TU Braunschweig)*  
[s.struck@tu-bs.de](mailto:s.struck@tu-bs.de), *Mareike Knust (TU Braunschweig)*, *Patricia Nowak (TU Braunschweig)*, *Mark Vollrath (TU Braunschweig)*

#### Purpose

Only some intersections in Germany are equipped with acoustical and haptical signals to support blind people. Moreover, the signals are sometimes hard to hear and the information they provide is limited. In order to develop a smartphone based app, observations and interviews of blind people when crossing an intersection were conducted.

#### Design/Methodology

Ten blind subjects were observed when crossing an easy and a difficult intersection. The intersections were selected based on the ratings of these blind people. They were instructed to tell an accompanying interviewer everything which entered their mind during these situations. Additionally, video recordings were done.

#### Results

From the observations, requirements for support are derived by defining different phases of the intersection crossing (e.g., approaching the intersection, waiting, crossing) and by establishing the relevant information needed

in the different phases. From these results, functional (what support should be provided) and non-functional (how should the blind be supported) requirements are defined.

#### Limitations

On the one hand, a quite small sample was used. On the other hand it is well known that even small samples are well suited to find the most relevant aspects in usability testing.

#### Research/Practical Implications

The results will be used to develop a smartphone-based app to support the intersection crossing of blind people.

#### Originality/Value

Although there are some approaches to support the navigation of blind people, an electronic aid for intersections is still missing.

### **Blind people cannot drive cars – should one improve their mobility?**

*Vollrath Mark (TU Braunschweig) [mark.vollrath@tu-braunschweig.de](mailto:mark.vollrath@tu-braunschweig.de), Struck Stefanie (TU Braunschweig), Patricia Nowak (TU Braunschweig), Mareike Knust (TU Braunschweig)*

#### Purpose

Obviously, blind people cannot drive cars and need to use other means of transportation in order to move around. Although different means of support are available ranging from mobility trainings to intersections equipped with acoustical and haptical signals, mobility is more demanding for blind as compared to seeing persons. It is examined how this influences the mobility of blind people and what is especially difficult for them.

#### Design/Methodology

In-depth interviews were conducted with 24 blind people in Braunschweig, Germany. A special focus was put on their typical ways during a week. This was compared to a representative survey on the mobility of Germans, the MID2008.

#### Results

Blind people have only 2.5 trips per day as compared to their seeing counterparts with .8 trips per day. However, when only seeing persons without cars are taken for the comparison this difference is reduced as these do only 2.7 trips per day. But the structure of the mobility is different: Blind people have more trips going to one location and then returning home while seeing ones often visit multiple locations.

#### Limitations

Due to the large effort required to interview the blind people, there is only a small sample. However, a larger internet based study is planned in order to replicate and extend these.

#### Research/Practical Implications

The results will be used to develop a smartphone-based app to support the mobility of blind people.

#### Originality/Value

Up to now, there are no valid data on the mobility of blind people in Germany.

### **“Stop! Break! Warning!” How to support the driver in urban scenarios**

*Mark Vollrath (TU Braunschweig) [mark.vollrath@tu-braunschweig.de](mailto:mark.vollrath@tu-braunschweig.de), Klaus Reinprecht (TU Braunschweig)*

#### Purpose

Many severe accidents happen in urban areas involving different types of accidents. Within the project UR:BAN user-oriented assistance systems are developed which shall on the one hand prevent accidents and on the other hand improve the quality of driving. However, this leads to an increasing amount of information for the driver while he is already stressed by the complexity of modern cities. Thus, a user-oriented approach is used to examine how to best support the driver.



### Design/Methodology

In a driving simulator study, different scenarios are developed where a critical situation similar to an accident is highly probable. By analyzing why these critical situations occur, requirements for an effective support of the drivers by assistance systems can be defined.

### Results

It is shown how the likelihood of a critical situation depends on certain characteristics of the situation which are systematically varied in the simulator study. The basic situations are turning left at an intersection with oncoming traffic and pedestrians crossing. Moreover, collisions with pedestrians when turning right are examined.

### Limitations

As the study is done on a driving simulator, the question of validity arises. Of course, the results will have to be validated in real traffic.

### Research/Practical Implications

The results will be used to develop an interaction strategy for future driver assistance systems in urban areas.

### Originality/Value

Although there are some studies on accident causation, an experimental approach to provoke critical situations is only rarely found. Thus, it is unclear how certain types of accidents are really caused.

## **Eye movements as a valuable source of data to predict driver intent - A comparison of machine learning models**

Firas Lethaus (DLR) [firas.lethaus@dlr.de](mailto:firas.lethaus@dlr.de)

### Purpose

An Advanced Driver Assistance System which bases its output purely on vehicle data will be prone to offering incorrect assistance in certain circumstances if it does not take account of driver intention. Information about driver intent augments assistance functions such

that they can adapt the assistance offered to the drivers' behaviour. Previous studies showed that significant characteristic gaze patterns precede driving manoeuvres, which can be used as indicators to determine driver intent.

### Design/Methodology

In this study, the utility of gaze data as a source of information to predict driver intent pertaining to lane change manoeuvres was explored as well as discriminating between which lane change manoeuvre; left or right. The aim of these experiments was to derive a model of driver intent from gaze behaviour data of 10 drivers, who performed lane change manoeuvres on a 2- and 3-lane motorway in real and dynamically-simulated traffic.

### Results

The performance of different machine learning models was examined and compared for differently combined methods of data encoding. The results demonstrate that it is easier to predict lane change manoeuvres to the left than those to the right. The predictive discrimination between left and right even reaches a true positive rate of .95 ( $d'=3.3$ ).

### Limitations

The limitations of the methodological approaches used are discussed.

### Research/Practical Implications

This study has shown that gaze data is viable as a stand-alone predictive indicator of lane change manoeuvres.

### Originality/Value

It is the first to systematically analyse the extent to which eye movements might be used to predict driving manoeuvres.

## Social Networking and Personality: Implications for the Organizations, Individuals, and the Industry

Session Chair: *Richard C Thompson (CPP, Inc.)*  
[rthompson@cpp.com](mailto:rthompson@cpp.com)

### State of the Art

Recently, Facebook crossed the 1 Billion Member threshold, with fully 1/7th of the world's population having an account. Social networking has become a ubiquitous part of most people's lives. Questions remain, however, about who uses social networking sites, and for what purposes; how social networking can impact individuals seeking work, and those at work. In addition, there are threats to the personality assessment industry from free psychometric assessments.

### New Perspectives/Contributions

A number of insights will be presented in this symposium. One paper discusses how organizations make use of Social Network sites as part of a candidate screen. However, the other studies show that people behave differently (an online persona) online than in person. In addition, the studies show that people use social networking sites differently based on their personality. The implications of these findings for organizations and the assessment industry will be discussed.

### Research/Practical Implications

The four studies indicate that individuals around the globe enjoy and use social networking websites. How people use these websites is not widely known. The studies in this symposium examine the use of social networking from a variety of perspectives, including personality, online presence or personas, and how these results may be used or misused by organizations. In addition, the threat of free online psychometric tests and implications for organizations and the industry are discussed.

## ***Presentations of the Symposium***

### **You didn't hire me because of my facebook profile?**

*Rob Bailey (OPP, Ltd.)* [Rob.Bailey@opp.com](mailto:Rob.Bailey@opp.com), *Paul Deakin (OPP, Ltd.)*

#### Purpose

This paper considers the use of social networking sites (SNS) in recruitment and selection, which, although a growing trend, is not accompanied by clear, consistent or fair policies from employers. It examines best practise and equality issues and presents recommendations for psychologists and HR Policy.

#### Design/Methodology

1,212 UK & Irish working age participants completed the 16PF personality questionnaire, plus a survey about SNS in recruitment, and online privacy.

#### Results

56% of people said that during a recruitment process they would be likely to search SNS for a job applicant. However, 27% indicated that, if they were the applicant, they would not want an interviewer to search for them.

People spending more time on SNS were more extraverted, younger, and had greater access to the Internet and new technologies. 37% of the sample stated they would change their character when online, calling into question the accuracy of information presented online. People most likely to share private information were less cautious and less likely to worry about harm to their reputation.

#### Limitations

It is a self-report survey, involving participants comfortable with online surveys.

#### Research/Practical Implications

Best practice concerns for SNS include: the validity, objectivity, and fairness of SNS as a

selection tool; and potential for direct and indirect discrimination.

#### Originality/Value

In this growing, but still novel area, the paper gives guidance to employers about validity and fairness, and advice for applicants about impression management and privacy.

### **Who do you think I am? The use of online personas from a personality perspective**

Nicola Taylor (Jopie van Rooyan & Partners)  
[nicola@jvrafrica.co.za](mailto:nicola@jvrafrica.co.za)

#### Purpose

This study examines the relationship between personality traits and the likelihood of having a different persona or identity on various social networking sites. The differences between self-reported personality traits and rated traits of the persona are also reported.

#### Design/Methodology

A survey was distributed on various social networking sites, where respondents (N = 500) were asked to rate their own personality and that of their online identity using the Ten-Item Personality Inventory. Respondents were also given a list of different behaviours and asked to rate the frequency with which they engage in them in person, on Facebook, Twitter, and LinkedIn.

#### Results

The results indicate that individuals who report having separate personas on social networking sites are likely to rate themselves lower on Conscientiousness than those who do not use personas. Individuals using personas tend to rate their persona's personality as less agreeable and emotionally stable than their own.

#### Research/Practical Implications

The main limitations to this study are that it was a sample of convenience, and may not generalize to all social networkers.

#### Originality/Value

The identification of types of personas has intrigued marketers of late, but little has been done to look at how different these personas are from the individual's own identity. Understanding how people express themselves differently in person and online provides important information to organisations who use information gleaned from social networking sites.

### **Who is using social networking: Social networking and MBTI® personality type**

Richard Thompson (CPP, Inc.) [rthompson@cpp.com](mailto:rthompson@cpp.com)

#### Purpose

This study was conducted to examine differences in social media usage based on personality types measured by the MBTI® instrument.

#### Design/Methodology

A survey was developed to measure social networking activities of individuals. The survey focused on both what social networking sites individuals uses, as well as what they do on the sites. Facebook, LinkedIn, Twitter, YouTube, and Web Blogs were examined. Individuals who had completed the MBTI® instrument were invited to participate in the survey. Responses were obtained from 1,784 adults.

#### Results

Regardless of personality type, most people use social media. Facebook and LinkedIn are the most commonly used. Individuals with a preference for Extroversion tended to use all social media outlets. Similarly, introverts were more likely to indicate social media was a waste of time. Results also showed that individuals with a Thinking Preference reported more usage of Facebook compared to Feelers, which was not expected.

#### Research/Practical Implications

The main limitations to this study are that it was a sample of convenience, and may not generalize to people in general. Also, the participants tend to be better educated than people in general.

#### Originality/Value

This paper provides a first look at how personality interacts with social media, and points to differences that have important implications. As organizations start to make use of social network sites, they may miss qualified candidates who do not use social media, and the results suggest that social media is not a solution for training and HR professionals who want to replace traditional training and communication venues with online activities.

### **Free online psychometric tests; are they a disruptive innovation for the assessment industry?**

*Rob Bailey (OPP, Ltd.) [Rob.Bailey@opp.com](mailto:Rob.Bailey@opp.com)*

#### State of the Art

The trend to offering free online psychometric tests accessible through social networking sites is growing. One site that is currently offering good quality assessments free of charge has had over five million users in the past two years. This could be the beginning of a disruptive change to the assessment industry. It could mean that the assessment industry will have to adapt in the same way as the recorded music industry has had to do.

#### New Perspectives/Contributions

The presenter of this discussion will give examples of popular online assessment sites and sketch the disruptive possibilities for the industry. Although many online assessments mimic what has traditionally been done on paper, some features allow more novel applications (for example for friends to connect via social networking sites and to compare and contrast their personality results).

#### Research/Practical Implications

The implications are varied: they concern the credibility of psychometric assessment, the ethical issues of automated assessment and the sustainability of the industry.

#### Originality/Value

Originality is central to disruptive technology; the aim of this presentation is to explore new features and approaches to online assessment and to discuss how this changes the traditional model of practitioner-led assessment and feedback. The value of this presentation will be to provoke thought about how test publishers and psychologists might need to adapt their approaches to ensure that they provide a valuable service in the face of free competition.

### **Single Papers**

### **Reducing unplanned loss through transverse resource practice offshore**

*Kristine Kjellsen (Kongsberg Oil and Gas Technologies, NO) [kkj@kdms.no](mailto:kkj@kdms.no)*

#### Purpose

Transverse use of resources and virtual management may be the best sustainable option in a market where resources are getting scarcer and more individuals sustained with fewer laborers. It requires smarter and increasingly automated ways of working.

#### Design/Methodology

The model entails an overall responsibility for maintaining the integrity of certain equipment through condition and project based maintenance in Oil and Gas production. Tasks, responsibility and professional resources are organized in one unit for multiple installations. Engineers, executing personnel, planners, condition monitoring, and follow up are gathered in one organizational unit.

### Results

The model contributes to a substantial reduction in unplanned production loss. It allows one of the top ten international oil and gas companies to plan approximately 1000 maintenance and improvement campaigns across 29 installations yearly, 80% as delivered on plan, with a serious incident frequency (SIF) of zero and they receive positive “client” feedback on their customer satisfaction survey.

### Limitations

Unions fight to keep the number of positions and beneficial contracts offshore. In addition they argue that there are quite extensive equipment and system differences between installations. Without the proper installation knowledge, dangerous situations may arise. The conflicts and issues have been managed through principles of collaboration technology and understanding human factors.

### Research/Practical Implications

The model allows synergies, unique experience transfer and establishment of best practice. More work is completed with fewer resources using them across installations.

### Originality/Value

The organizational model can be applied across a multitude of disciplines. It is a holistic model for condition and project based work.

### **Virtually trustworthy: Using nonverbal mimicry to establish trust and belongingness over webcam**

Judith Rachl (RuG Univ., NL) [j.rachl@rug.nl](mailto:j.rachl@rug.nl), N. Pontus Leander (RuG Univ., NL), Nico van Yperen (RuG Univ., NL)

In the new world of communication, people must learn to effectively communicate over digital media. However, it is not entirely clear how and whether digital communication (e.g., via webcam) differs from face-to-face interactions. In this study, we present behavioral

mimicry as a social cue for webcam interactions. Behavioral mimicry has shown to be an important factor in our everyday life interactions (Chartrand & Bargh, 2009), and may also be a cue to fulfilling one’s fundamental belongingness needs (Baumeister & Leary, 1995). But how do the effects of such a primitive behavior as mimicry convey over a webcam? To test this question, we experimentally manipulated whether participants were mimicked or not by a confederate and over the course of either a face-to-face or webcam interaction. Afterwards, we measured belongingness and trust. The results show that mimicry conveyed the same amount of trust when it occurred over webcam as compared to a face-to-face interaction, but mimicry did not convey any feelings of belongingness in that way that it did in a face-to-face interaction. Our research is the first step into the new world of communication devices and how it may facilitate—or hinder—people’s fundamental need to belong. Further research is needed to examine whether people intuitively (i.e., nonconsciously) perceive digital communication as a viable means of fulfilling their belongingness needs.

## Posters

### **Social networks and social capital at work: Evidence from Puerto Rico**

*Laura Galarza (Universidad de Puerto Rico, US)*  
[lagalarza@yahoo.com](mailto:lagalarza@yahoo.com), *Geovanni Lopez (Univ. of Puerto Rico at Bayamon)*

#### Purpose

The main purpose of the study consisted on examining the use of the Facebook social network on a sample of workers from Puerto Rico from the perspective of the Social Capital Theory. Several hypotheses predicted a larger use of Facebook to maintain relationships

known by Facebook users rather than to develop new social capital.

#### Design/Methodology

A questionnaire was administered to a sample of Puerto Rican workers who answered questions on the use of social networks at work and their social network connection patterns. The questionnaire also included questions regarding the technology used for daily connection to the social network.

#### Results

The results showed support for the study hypotheses. The findings demonstrate a positive correlation of indicators of social capital potential with usage pattern variables such as: daily time connection to Facebook and the use of Facebook to connect with known persons rather than to meet new people, among other results.

#### Limitations

The results are based on self-reports.

#### Research/Practical Implications

The results are consistent with the Social Capital Theory and with studies conducted in the United States. The main function of social networks seems to be the maintenance of the

real social network of the user with the objective of maintaining the existing social capital. The results also show how the technology is related to usage of social networks at work.

#### Originality/Value

The study is part of a research program on the social capital and social networks at work in Puerto Rico in a culture different from the United States where most research has been conducted on this topic.

### **Rational choice and non-compliance with internet use policy at work**

*Jeffrey J Bagraim (Univ. of Cape Town, ZA)*  
[jeffrey.bagraim@uct.ac.za](mailto:jeffrey.bagraim@uct.ac.za)

#### Purpose

The purpose of this investigation is to understand whether intention to comply with internet use policy is motivated by rational cost-benefit decision-making. Non-compliance with internet use policy refers to employees' non-work related use of internet access, provided by an employer for work purposes. Common problems resulting from non-compliance with internet use policies include internet security threats and productivity losses. The issue is exacerbated in work contexts of secure employment such as in much of the public sector.

#### Design/Methodology

Respondents (N=237) completed a survey at a large local authority with a strong employee union and secure employment practices.

#### Results

Perceived risk factors (i.e., perceived detection probability, sanction severity, subjective norms, and security risks) did not explain significant variance in intentions to comply with the internet use policy. Organisational norms and organisational identification helped explain significant variance in personal norms against internet abuse at work.



### Limitations

The sample was limited to a single organisation, the design was a descriptive and cross-sectional and self-report scales were the only source of data.

### Research/Practical Implications

Organisations with secure employment need to apply interventions aimed at personal norms rather than sanctions in order to counter internet abuse.

### Originality/Value

To my knowledge, the study is the first to systematically examine the rational choice and non-compliance with internet policies in the context of secure employment.

## **What are you looking for? Measuring operator's supervisory and control behavior in a socially augmented microworld**

Melanie Janina Christine Stade (Humboldt Univ., DE) [melanie.stade@hu-berlin.de](mailto:melanie.stade@hu-berlin.de), Charlotte von Bernstorff (Humboldt Univ., DE), Nicolas Niestroj (Humboldt Univ., DE), Jens Nachtwei (Humboldt Univ., DE)

### Purpose

In human-machine interaction research, analyzing operator performance in complex and dynamic microworlds is a challenge. In particular, dealing with many and highly variable data that are generated by microworlds is connected with several methodological difficulties. In our lab system a human operator supervises and controls a microworld including the pursuit tracking performance of two other participants. Operators were instructed to optimize the tracking by the use of inputs and outputs of a unique master display. The objective was to examine several eye movement and control action parameters for differentiating operators in their performance.

### Design/Methodology

Concerning the complexity and dynamic of the lab system, we will show and discuss analysis

perspectives on our high resolution click and eye tracking logs in two conducted studies (N = 40 and N = 13).

### Results

The presented procedure of data analysis seemed appropriate for measuring and evaluating operator performance in our complex and dynamic microworld.

### Limitations

Due to different ways of data aggregation, immediate effects of operators' behavior on tracking performance as well as supervisory-control interaction were not be investigated.

### Research/Practical Implications

Based on the analysis and discussion of investigated and further performance parameters we will show that both our lab system and data analysis approach offer interesting research (e.g., measuring attention allocation in dynamic systems) and application opportunities (e.g., personnel selection).

### Originality/Value

We examined different behavior parameters for describing and evaluating operators' performance in several types of track sections varying in complexity and dangerousness.

## **Effects of trust in high risk organization during technological changes**

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### Purpose

The purpose of this study was to explore acceptance of and safety concerns about implementation of a new automated drilling technology in a high risk organization.

### Design

In this project 22 interviews were conducted of 15 informants over a period of 8 months. The informants were all male personnel on an

offshore oil and gas installation. Observations of a drilling crew's offshore operation were also conducted. Grounded theory (Strauss & Corbin, 1996) was used for analysing the data.

### Results

The conclusions were that the change process was successful in the sense that the operators accepted the new technology. This was explained using Armenakis and Harris' (2002) model of readiness to change. However, it could be questioned if the operators had too much trust in the safety aspects of the change process due to a non-questioning acceptance. Too much trust is found to reduce risk perception and is not in accordance with the theory of a high reliability organization (Weick & Sutcliffe, 2007) which high risk industries are expected to be.

### Implications

We argue that the term trust should be more nuanced in high risk industry and that trust is not necessarily equivalent with a safer work environment. A question we find that needs more attention is how high trust and a questioning and sceptical culture could coexist and how such a culture could be promoted.

# 12. Occupational and organizational safety

## Position Papers

### **Integrating a Contextual and Trait Perspective to Behavioral Safety Leadership: The Role of Safety-Critical Work Contexts and Leader Flexibility**

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#### State of the Art

Much safety-specific and wider organisational research has concentrated its attention on the positive relationship between transformational leadership and different outcome criteria including safety performance (Barling, Loughlin, & Kelloway, 2002). In contrast, transactional leadership has been neglected in leadership research and is often depicted as an ineffective leadership style. Not uncommonly, studies examining leadership effectiveness have solely focused on transformational leadership, and from the outset omitted transactional leadership from their investigations. Antonakis, Avolio, and Sivasubramaniam (2003) denounce this unconfined negative view of transactional leadership as lacking empirical underpinnings and instead suggest that the effectiveness of transactional leadership is context-sensitive. Yet, few concrete conceptual developments integrating contextual perspectives into dominating frameworks such as transformational-transactional leadership theory have followed. To date, there has been little acknowledgement that the context-dependent effect of transactional leadership

has the potential to be of particular importance for workplace safety.

This paper presents a new perspective by integrating a contingency view into transformational-transactional leadership. It is argued that in safety-critical work contexts such as oil and gas installations, transactional leadership might be an effective leader behaviour, but less so in non-safety-critical conditions. Beyond that it is proposed that the emerging construct of leader flexibility, which describes the ability to adjust one's leadership style to situational demands, is of importance for fostering a positive safety climate. This new perspective adds the advantage that it includes consideration of leader traits within the behavioural view of transformational-transactional leadership theory. By incorporating a contingency and trait view, the paper applies recent appeals within the leadership arena to move away from searching for a single, effective leadership style, and progress towards a more realistic approach that acknowledges the value of using a range of leader behaviours (Rowold, 2011).

#### New Perspective/Contribution

In safety-critical contexts employees often experience conflict between different job requirements (e.g. production and safety). Leaders are faced with the task to integrate these opposing demands to help employees make sense of the ambiguity as to which goals preponderate. It is argued that the combination of increased ambiguity and tight margins for mistakes, which characterises high-risk contexts, would place particular relevance on transactional leadership. Performance in perilous conditions requires the following of safety rules and refraining from short-term goals, such as comfort or production speed. Thus, transactional leader actions, such as providing rewards contingent on safe behavior, clarifying the priority of safety through clear objec-

tives and correcting deviations from standards would be critical.

In less safety-critical conditions, in which the consequences of errors may be less severe, it is argued that employees would not experience competing demands as strongly. Hence, transactional leadership would not be as important to achieve high employee performance. Instead, employees might experience transactional behaviors as too controlling and might be less perceptive towards a transactional leadership style.

**Proposition 1.** In a safety-critical context, transactional leadership is valued as a positive leadership style, and has a positive relationship with performance outcomes. In less safety-critical contexts, transactional leadership is less valued and transactional leadership has a less positive association with performance measures.

Within the safety literature, safety climate has been identified as a predictor of safe behaviour (Clarke, 2010). Safety climate has been described as an atmosphere where the priority of safety is unequivocal and where employees are self-propelled to behave safely. Achievement of such environment is likely to require a range of leader behaviors (Mullen, Kelloway, & Teed, 2011). Leaders can clarify safety expectations and responsibilities using transactional tactics, and can then create motivation for safety through transformational leadership. Without the initial base of direction through transactional leadership, transformational leadership efforts might be ineffective (Avolio, 1999).

This is in line with Bass' (1985) augmentation hypothesis whereby transformational leadership builds on transactional leadership. It is therefore suggested that to maximize leader effectiveness in fostering a positive safety climate, transactional as well as transformational leadership style are needed. This propo-

sition overcomes the prevailing competitive view of transformational-transactional leadership style.

The construct of leader flexibility suggests that it is not sufficient to possess a behavioral spectrum of different leadership practices, but that effective leaders must be able to identify the specific demands of a situation and respond with the most appropriate leadership tactics (Yukl & Mahsud, 2010). Thus, outcome criteria such as a positive safety climate might not be the product of simply applying both transformational and transactional, but results from a situational-adapted incorporation of the two leadership styles.

**Proposition 2:** Leader flexibility has an effect on safety climate beyond transactional-transformational leadership style.

#### Conclusion and Implications for Research/Practice

Different theorisations of leadership such as trait, contingency and behavioural perspectives have often been investigated in isolation from each other. This paper offers a unique approach that synthesises behavioural (transformational-transactional leadership), contingency (safety-critical-context versus non safety-critical-context) and trait (leader flexibility) perspectives of leadership. The propositions presented provide a conceptual framework for future research examining leadership effectiveness in high-risk contexts.

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## Single Papers

### The SIKUMETH-approach: Assessing safety culture in nuclear power plants

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Based on Schein's (1985) model of organizational culture, we will present a new methodology for improving safety in nuclear power plants (NPPs). In contrast to commonly used

assessment methods, our SIKUMETH approach includes both qualitative and quantitative methods completing each other. Importantly, it aims at supporting members of NPPs to assess and optimize the safety culture of their own organization.

The methodology was developed and applied in close cooperation with a reference NPP (N=164) and validated in a second plant (N=264). Specifically, according to our approach, an assessment starts at the upper two levels of Schein's model (level of artefacts and level of espoused values). Organizational members identify and formulate plant-specific work practices, which are then evaluated according to their actual and ideal implementation by use of an organization-wide questionnaire. Contrasting the actual and ideal implementation allows to identify cultural gaps, i.e., inconsistencies between "what is done for safety" and "what is valued for safety". Identified inconsistencies are then taken as a guideline for the application of assessment methods (based on the system-dynamics approach), which aim at identifying dynamic behavioral models and basic assumptions contributing to the existence of the identified gaps and their consequences. Finally, the elicited basic assumptions are rated according to their dominance in the given culture and possible interventions to improve safety culture (i.e., to close the gaps) are developed. The results of the method's evaluation indicate a high acceptance and appreciation of the methodology. Assessment results will be discussed in the light of potential improvements of safety performance in NPPs.

### Safety behaviour in nuclear power plants: Link between role stressors and safety behaviour mediated by job and safety satisfaction

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#### Purpose

Safety behaviour is crucial to the safe and successful operation and maintenance of nuclear power plants; however the impact of role stressors and psychological strain on safety behaviour remains almost unexplored. We hypothesized that job satisfaction and safety satisfaction will partially mediate the relationship between role ambiguity and safety behaviour, and that a direct negative effect of role overload on safety behaviour will be found. Our theoretical model is based on role stress theory.

We sampled 566 employees from a nuclear power company in Spain with a self-report questionnaire. Structural equation modelling (SEM) confirmed the hypotheses, except that the relationship between role ambiguity and safety behaviour is fully mediated, not partially.

#### Design/Methodology

We sampled employees of a nuclear power plant with several locations in Spain (N = 566). CFA and SEM were performed.

#### Results

The CFA revealed that the survey questions were good indicators of the variables used. The SEM confirmed the hypotheses, except that there is a full mediation of role ambiguity on safety behaviour; the direct effect is not statistically significant upon introduction of job and safety satisfaction.

#### Limitations

A self-report questionnaire was the only method used and the results are not generalizable to other industries.

#### Research/Practical Implications

The findings could be utilized for prevention and intervention programs in the nu-

clear power industry. Future investigations could improve or confirm the model.

#### Originality/Value

This research adds to the findings that role stressors have a statistically negative effect on safety behaviour, thus offering a more conclusive understanding of the relationship.

### Effective crisis management through generative cultures: The Tylenol crisis

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In 1982 a crisis without precedents was installed in all US. Seven persons died after taking Tylenol. The way Johnson & Johnson, the company, answered and managed the crisis is until now considered as an example in the management area.

Some organizations are known to have fewer accidents and face crises with less negative consequences due to the implementation of a mindfulness infrastructure (Weick & Sutcliffe, 2007). On the other hand, Reason (1997) highlights that organizations should have an informed culture, as being a generative culture that allows them to face crises and accidents with less consequences, avoiding them and also learning with such happenings; these events, in the future, would allow them to prevent some potential occurrences.

A qualitative study was developed by analyzing some papers (i.e., Nº17, four about news, six with more explanations about the case and 7 about investigations done about the case) focused on how J&J managed and survived the crisis. They were submitted to a content analysis with Atlas-ti, considering as theoretical propositions the informed culture (Reason, 1997) and the mindfulness infrastructure (Weick & Sutcliffe, 2007). The Tylenol case is a case study that is cited in several papers (e.g.,



Foster, 2002) but until now it was not analyzed in terms of the existence of generative cultures (Reason, 1997).

Results show some evidence of informed culture and mindfulness infrastructure. This paper approaches Tylenol murders in a new perspective following two theoretical backgrounds in an innovative way. Also some similarities between both theories were found.

### **Empowering leadership and safety performance in nuclear industry. Psychosocial factors involved**

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#### **Purpose**

This paper aims to study the influence of an empowering leadership style in safety performance, finding out which are the main mechanisms or paths by which empowering leaders influence their members' safety behavior, and finally, what other factors could be moderating the relationship between both variables. We hypothesized there are three different safety performance factors, one of each is influenced by empowering leadership in a different mediated-moderated way. Thus, three different models were proposed and tested following previous theoretical and empirical research.

#### **Design/Methodology**

We recorded the data from two Spanish nuclear plants and the headquarter offices of both plants N=495.

#### **Results**

- Confirmatory Factor Analysis determined the three-factor model better with regard to goodness of fit statistics.
- Three different structural equation models (one for each performance factor as dependent variable) supported the mediated and moderated models hypothesized.

#### **Limitations**

- Self report measures: Results may have been inflated due to respondents' tendency to respond in a consistent manner or answer in a socially desirable way.
- Cross-sectional nature, reducing variables to a "snapshot" rather than assessing them over time.

#### **Research/Practical Implications**

These results encourage researchers and practitioners to consider empowering leadership as a potential safety leadership style, beyond classical leadership theories such as transformational or LMX.

#### **Originality/Value**

The study is the first which proposes an empowering leadership style as potentially beneficial for safety performance in High Reliability Organizations such as Nuclear industry.

### **Safety at work: Perceptions of managers and employees and probability of having an accident at work in 11 different industry sectors**

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#### **Purpose**

The aim of the research is to identify how employees of 11 different industrial sectors assess their ability to respond to organization-

al demands such as time, innovations, guidelines, workload, fatigue and changes (self-evaluations), and to compare these evaluations with those expressed by the managers on the ability of employees to meet the same organizational demands (hetero-evaluations). It is hypothesized that, as the difference between self-evaluations and hetero-evaluations increases, the perceived probability of having an accident also increases.

#### Design/Methodology

The sample: 202 subjects, including 8 managers. A questionnaire asks: 'How much do you think you are able to do the job according to your ability to manage time, innovations, guidelines, workload, fatigue and changes?' The answers are expressed on a 5-point rating scale, 1 = not able, 5 = highly able. Managers are asked the same question. They are also asked to assess the level of ability possessed by employees in relation to the previous organizational demands. Regarding the perceived probability of having an accident, the question is: 'As for your company, indicate a hazardous situation and assess the probability that you and others have a mayor accident or even be subject to death (0 = minimum probability, 100 = highest probability).'

#### Results

Analysis of variance supported all hypotheses.

#### Limitations

The absence of a cross sectional study and the limited sample of managers.

#### Research/Practical Implications

How to promote confrontation between managers and workers to prevent accidents.

#### Originality/Value

Studying multi-level organization as concurrent causes of accidents.

### **Medical communication at shift change and human error: Could a cognitive support make health care safer?**

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#### Purpose

To improve the quality of medical handover in emergency departments, we studied the content of handoffs based on actual handoff discourse between physicians.

#### Design/Methodology

We created standardised tools and tested their usability on the ground. We used different criteria to evaluate their impact on the health care process including frequency and type of information communicated between physicians, duration, physicians' evaluation of the quality of the communication, time distribution between the different tasks in the health care process. Data were collected by observation and video recordings. Concerning the statistical approach, we applied Pearson's Chi Squares to test our hypotheses.

#### Results

Our results showed that the patient's medical history, significant tests results, recommendations about the treatment plan and patient follow-up are communicated to a greater extent when the tools are used. We also showed that physicians spend more time at the bedside and less time consulting medical records using standardised tools.

#### Limitations

Because of our tools' paper form, physicians were first reluctant to use them. We had to manage some difficulties to collect enough data. Only a long-term study could allow a real change in organizational culture.

#### Research/Practical Implications

We showed that a cognitive support based on field observation improves the exchange of

information between physicians, and so increase patients' safety.

#### Originality/Value

Most of the studies about medical communication concern paramedical team. We focused on medical team. Moreover, unlike previous studies, we proposed a practical tool and not only recommendations.

### **Cognitive failure, sleep quality and social stressors at work: In-depth analysis of 5 work days and preceding nights**

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#### Purpose

In a longitudinal psycho-physiological field study, we tested whether social stressors at work, sleep quality and recovery in the morning predicted daily levels of cognitive failure at work.

#### Design/Methodology

Forty full-time white collar employees from two organizations participated in the study that started on Tuesday until following Tuesday. Assessment included a general questionnaire on social stressors at work, daily assessments of self-reported work-related cognitive failure and recovery status. Continuous ambulatory actigraphy revealed psycho-physiological indicators of sleep quality.

#### Results

Daily work related cognitive failure was negatively associated with recovery status. Cognitive failure was found to be higher during Monday morning compared to other work days. Multilevel regression analyses also revealed that social stressors at work significantly predicted cognitive failure at work, but sleep onset latency and sleep duration of the preceding night did not.

#### Limitations

Further studies should replicate the findings and include more than one working week.

#### Research/Practical Implications

Peak levels of cognitive failure on Monday morning, and the association of cognitive failure with social stressors at work contribute to understanding the mechanism involved in increased prevalence of occupational accidents during Monday morning.

#### Originality/Value

To our knowledge this is the first daily field study on occupational safety that includes objective measurement of sleep quality and daily work-related cognitive failure.

### **Applying the dirty dozen categorization of human error causes to the operating room**

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*Nicki Marquardt (Hochschule Rhein-Waal, DE)*

#### Purpose

Preventable human errors in medical care, almost half of which happen in operating rooms, constitute a major threat to patient safety. In order to reduce the risk of accidents and critical incidents it is imperative to determine and understand the most significant causes behind human errors in operating rooms. The presented study aims to establish the applicability of the dirty dozen categorization of human error to the medical field.

#### Design/Methodology

Eye specialist surgeons on the one hand and surgical staff on the other hand participated in an exploratory field study, rating the significance of twelve human error causes for the operating room and giving examples of critical incidents during surgery caused by human error.

### Results

While pressure and stress were among the causes of human error with the highest significance ratings in both groups of participants, surgeons placed more emphasis on a lack of communication as cause of critical incidents whereas surgical staff prioritized a lack of resources as significant error cause in operating rooms. Significant differences in rating scores arised for the categories stress, lack of resources and complacency while the other categories show similar ratings for both groups of participants.

### Limitations

Exploratory factor analysis shows that empirically not all dirty dozen categories can be separated accurately from each other.

### Research/Practical Implications

Differences in rating scores between the two groups of participants illustrate that, in order to better understand the occurrence of human error in operating rooms, different perspectives have to be regarded.

### Originality/Value

This is the first study applying the dirty dozen categorization to the medical field.

## **A multi-level investigation of the impact of safety climate and safety communication on safety performance**

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### Purpose

This applied research study sought to examine the complex relationships between safety climate, safety communication, and safety performance.

### Design/Methodology

A survey was administered to 1,134 employees at four organisations within the mining, construction, and utility industries across the

United States, Australia, and South Africa. A multi-level approach was used to analyse the data, with employees' responses being aggregated to the team-level for safety climate, and both safety climate level and strength being calculated for each team. Four dimensions of safety communication (upwards, downwards, between teams, and within teams) were measured at the individual level. Both safety compliance and safety participation were considered as performance criteria.

### Results

Results indicated that while team safety climate level predicted some dimensions of safety communication (e.g., within teams), it did not predict others (e.g., between teams). Furthermore, safety climate strength moderated the safety climate level-safety communication relationship. Finally, safety communication dimensions were differentially related to safety compliance and safety participation.

### Limitations

While the data were collected across multiple organisations and a multi-level study design was utilised, all data were collected using a single source (individual employees) and methodology (one survey).

### Research/Practical Implications

It is important that we can clearly distinguish between similar but distinct safety constructs so that we can educate organisations about the unique importance of these constructs. It is also helpful to investigate both safety climate strength and level, when diagnosing organisational safety problems and designing safety interventions.

### Originality/Value

This study attempts to understand safety climate's role in fostering safety communication and safety performance by collecting data at four international organisations.

### **Why do employees quit their workgroup? Exploring interaction effect of role clarity, safety climate and safety climate strength.**

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#### **Purpose**

Ambiguity is few tolerated by employees of HRO. A weak safety climate and low levels of role clarity could push employees to quit their workgroups to avoid stress and unsafe situations. Thus, the main goal of this study is testing the three way interaction effect of role clarity, safety climate and safety climate strength on intention to quit a workgroup.

#### **Design/Methodology**

We analysed a sample of 525 employees (48 workgroups) from 2 nuclear power plant. After aggregating safety climate at group level, we tested the 3 way interaction effect by HLM procedure.

#### **Results**

Results showed main effects of safety climate strength and role clarity. Nevertheless, results did not show a 3 way interaction effect, but we found a significant two way interaction effect between safety climate and safety climate strength on intention to quit. Interaction effect revealed that the weaker safety climate and the less levels of safety climate, the more intention to quit of workgroup members.

#### **Limitations**

The study is cross-sectional and we use self-reported measures, but we control common method of variance by Harman's test.

#### **Research/Practical Implications**

These results shed light on the need of HRO's employees to have a safe clear and defined role position in their workgroups. Additionally, results support the scarce previous research on strength of safety climate. Finally, high

levels of quit could warn that there is a weak safety climate and role ambiguity in a HRO's workgroup.

#### **Originality/Value**

This study contributes to develop concept of safety climate strength and open new venues to research on intention to quit.

### **Shared time pressure and safety climate. The moderating role of support climate**

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#### **Purpose**

To examine the moderating role of support climate in the relationship between time pressure and safety climate at the group level of analyses.

Many work stress theories postulate that job demands will be detrimental for occupational wellbeing, and that this relationship will be palliated when there are high job resources. This study hypothesized that the negative relationship between time pressure and safety climate will be palliated by support climate.

#### **Design/Methodology**

This study is based on a sample of 367 drivers pertaining to 34 different transport organizations.

#### **Results**

Findings showed that support climate buffer the negative relationship between time pressure and safety climate.

#### **Limitations**

This study is cross-sectional and based on self-reported data.

#### **Research/Practical Implications**

Organizational time pressure and its influence on safety becomes a relevant concern for organizations operating in a competitive envi-

ronment. Thus, research on how to palliate its detrimental effects is valuable.

#### Originality/Value

Compared to other occupations, work-related drivers account for higher number of fatal work injuries. Previous research has mainly focused on individual factors influencing safety such as driving knowledge or sleepiness among others. Although occupational stress has also captured researchers' attention, it has been operationalised at the individual level of analyses. Nonetheless, over last decades it has been widely recognized the impact of organizational environment (e.g., pressure toward cost-effectiveness) on safety performance. This study addresses this issue focusing on time pressure and support climate at the group level of analysis.

#### **Work environment and safety climate: What factors are important for the employee's experience of safety climate and safety compliance?**

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During the last decade's safety issues and theoretical concepts such as safety culture, safety climate and safety management have become more important in organizations as well as in working life in general. This trend has also affected the health care sector where theories on safety culture and climate, safety management and safety behavior now are considered vital ingredients in the health care organizations. The question is, how and in what way do the perceived working environment relate to safety attitudes and behaviors such as safety climate and safety compliance? Therefore, this study focuses on work environment issues (e.g., work load, team climate, autonomy and leadership) and their impact on employee safety climate perceptions, safety compliance and safety behavior. In addition this study also test for the relative importance of

demographics, and occupation (status) for the attitudinal and behavior related safety outcomes. The study uses questionnaire data from a ward belonging to an emergency hospitals operating in the rural area in Sweden. Data are currently being collected and will be analyzed using structure equation modeling in order to test for a model linking work environment perceptions to safety outcomes. The results will be described and discussed in terms of theoretical implications relating to the linkage between work environment and safety behavior as well as in terms of practical implications for policy-makers and hospital managers. The paper highlights the importance of taking the work environment (work load, team climate and leadership characteristics') in to account in order to create a safety culture that both patients and employee's are benefiting from.

#### **Management commitment to health & safety: Communication and social environment as determinants**

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#### Purpose

Perceived management commitment to health and safety practices positively affects safety climate of organizations. Reciprocally, managerial approach is shaped by the organizational factors such as systems and policies, interpersonal relations and the workplace environment. Our study was designed to define the effect of employees' multi-facet satisfaction on perception of management including commitment to safety. Satisfaction from internal communication, social and physical environment and affective organizational climate were studied as the main predictors.

#### Design/Methodology

Participants (N=123) were a sample of operators and workers in a family owned production



setting. The management of health and safety is at very basic level. Measures of management satisfaction including management commitment to safety, perceptions of social environment and physical environment, communication and affective organizational commitment with 5 point Likert scale were used.

#### Results

Multiple Regression was conducted to determine best linear combination of affective organizational commitment ( $B=0,196$ ), communication ( $B=0,425$ ), satisfaction from social environment ( $B=0,387$ ) and physical environment ( $B=0,069$ ) for predicting satisfaction from managerial approach including their safety management practices. This combination of variables significantly predicted satisfaction from management  $F(4,61)=30.17$ ,  $p<0.001$  with three variables carrying significant contribution to prediction. Physical environment didn't have significant effect.

#### Limitations

Data were collected from one production site and sample size might be larger.

#### Research/Practical Implications

Current study emphasizes the mutual influence of effective management and commitment to safety on positive social climate created through internal communication and supportive social environment.

#### Originality/Value

Social factors and communication processes are not very frequently investigated in safety field and very limited in Türkiye.

### **Safety citizenship role definitions and safety violations**

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#### Purpose

To explore the importance of employees defining critical safety-related discretionary behaviors as part of their job on job-related safety violations. We use the job demands-resources model as extended to safety behaviours by Hansez & Chmiel (2010) as a guide, focusing on work engagement and perceived management commitment to safety as potential antecedents to safety citizenship role definitions.

#### Design/Methodology

Two organizations were surveyed, one from the UK ( $n=179$ ) and one from Belgium ( $n=314$ ), involved in chemical processing. Self-report measures included routine and situational safety violations, work engagement, perceived management commitment to safety, safety citizenship role definitions and job control.

#### Results

Path analyses from each sample provided strong support for the proposition that safety citizenship role definitions can mediate the association of work engagement and perceived management commitment to safety with situational safety violations, and the proposition that both work engagement and perceived management commitment to safety mediate effects of job control. Interestingly safety citizenship role definitions had no mediating role between work engagement and routine safety violations.

#### Limitations

All measures were self-report and therefore possibly subject to common method variance, although the pattern of our results suggested this was unlikely.

**Research/Practical Implications**

The findings suggest that social processes signalling that desirable discretionary safety activities should be considered 'in-role' by employees could lead to safer working.

**Originality/Value**

This study demonstrates for the first time that safety citizenship role definitions may play an important role in mediating safety-specific and other factors and safety violations, and so should be considered in extensions of the Job-Demands Resources Model in explaining safety behaviours.

### **Implementing and evaluating a global psychologically based safety training intervention**

#### **Winner of the EAWOP Congress 2013 Best Practitioner Contribution Award**

Autumn Krauss (Sentis, US)

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**Purpose**

The purpose of this safety training intervention was to provide employees with knowledge and skills in key psychological principles to enhance their safety attitudes, beliefs, and behaviour.

**Design/Methodology**

This intervention utilised a train-the-trainer approach by training employees who were not trainers, psychologists, or safety professionals to deliver two days of psychologically based safety training to all employees at a global fish farming organisation. To date, 3,319 employees have been trained in English, French, Spanish, Dutch, and Norwegian. Three waves of training evaluation data were collected to identify factors that impact the transfer of safety training and evaluate the changes in safety culture and behaviour resulting from the intervention. These waves include a participant survey at the end of the training pro-

gram, a structured interview completed one month after training, and a survey completed six months after training.

**Results**

By matching employee data obtained at all three data collection periods along with safety incident data before and after training, we were able to demonstrate the impact of the safety training on employee safety attitudes and behaviour as well as identify the critical factors that determine whether employees use the training on-the-job.

**Limitations**

Because of the train-the-trainer approach, study limitations included limited direct access to employees and minimal control over the collection of study data (relying on trainers and implementation project teams to champion the effort).

**Research/Practical Implications**

This project offers insights into the design, implementation, and evaluation of safety training interventions globally.

**Originality/Value**

This is a large-scale safety training intervention grounded in the psychology of workplace safety and training evaluation.

### **Organizational resilience and its relationship with excellence and reliability**

Inmaculada Silla Guerola (CIEMAT-CISOT, ES)

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**Purpose**

Organizational resilience relies on front-line employee's participation conceptualizing human behaviour as a source of anticipation and adaptation instead of performance deviation or errors.

This study aims to examine the relationship between organizational resilience and excellence and reliability of organizations. Additionally, the underlying mechanisms in these relationships were examined.

#### Design/Methodology

This study adopts a mixed-method approach. Firstly, interviews were conducted. Secondly, a survey was administered to all the employees. Finally, overall findings were discussed with employees in order to contextualized survey results. The head of the different departments and union representative were interviewed. Additionally, three hundred and twenty-six employees were surveyed. Finally, four group discussions were conducted.

#### Results

Overall, results showed that organizational resilience was positively related to compliance, safety behaviours and clients' satisfaction. Additionally, group discussions shed light into employees' conceptualization of safety and their contribution to excellence and reliability.

#### Limitations

This is a crosssectional study based on self-reported data.

#### Research/Practical Implications

Findings contribute to theoretical development on organizational resilience which contributes to improve safety and reliability in complex sociotechnical systems. To date, research on this issue is scarce.

#### Originality/Value

Organizational resilience is critical for excellence and competitiveness in contemporary organizations. This is especially true in organizations where safety, reliability and production go hand in hand. Nonetheless, research on this issue is scarce and mainly based on case studies.

### **Predictors of the transfer of safety leadership training**

*Autumn Krauss (Sentis, US)*

[autumn.krauss@sentis.net](mailto:autumn.krauss@sentis.net), *Tristan Casey (Sentis, US)*, *Peter Chen (Univ. of South Australia, AU)*

#### Purpose

The purpose of the current research is to identify individual and organisational factors that improve the transfer of safety leadership training.

#### Design/Methodology

Supervisors at a public utility company in Queensland Australia participated in a safety leadership training program over the course of several months. A repeated measures with daily diary study design was used to investigate factors relevant for the transfer of safety leadership training before, during, and after the training period. Predictors considered within the study included motivation to lead, motivation to learn, safety locus of control, opportunity to perform, safety training transfer climate, training reactions, and intentions to transfer. Criteria included transactional and transformational safety leadership behaviours targeted in the program along with safety conversations that supervisors engaged in with subordinates.

#### Results

Results indicated that both individual and organisational factors predicted supervisors' transfer of the safety leadership training, with some factors being more predictive early on in the transfer process (transfer generalisation) and other factors becoming more important after training had been occurring for some time (transfer maintenance).

### Limitations

The study had a small sample size ( $n=24$ ), which was necessary due to the extensive resource requirements on the part of the participating organisation (14 survey periods throughout three months coupled with a daily diary).

### Research/Practical Implications

Identifying the individual and organisational predictors that help or hinder the transfer of safety training allows for more effective safety training to be developed, increasing the return on investment made by organisations.

### Originality/Value

This study combined safety leadership and safety training to investigate an important topic within the workplace safety domain.

## Posters

### Patients' safety culture and suboptimal care. Results from the ORCAB study in Romania

Florina Dana Spanu (Babes-Bolyai Univ., RO) [florinaspanu@psychology.ro](mailto:florinaspanu@psychology.ro), Adriana Baban (Babes-Bolyai Univ., RO), Mara Bria (Babes-Bolyai Univ., RO), Lucia Ratiu (Babes-Bolyai Univ., RO)

#### Purpose

Improving patients' safety and quality of care is now a priority for health care systems around the world (IOM, 2001; NHS, 2000; WHO, 2012). Creating a "patient safety culture" in which health professionals are focused on detecting and correcting problems and errors, and not so much on finding someone to blame, is thought to improve quality of care (IOM, 2001; NHS, 2000). Our aim was to investigate the relationship between four dimensions of the Patient Safety Culture (Hospital support for patient safety, Supervisor expectations and behaviors promoting patients' safety, Frequency of events reporting, and Feedback and Communication about errors)

and self-reported measures of Suboptimal Care.

#### Design/Methodology

Data were collected, as part of the ORCAB study, on a sample of 432 health professionals in Romania. SEM in AMOS with Bootstrapping analysis was used to test the hypothesized model.

#### Results

Data were found to fit the model very well ( $\chi^2(2) = 4.103$ , CFI = .998, GFI = .996, RMSEA = .046). Hospital support for patient safety was found to be positively associated with Supervisor expectations and behaviors promoting patients' safety, Frequency of events reporting, and Feedback and Communication about errors, and negatively associated with Suboptimal care.

#### Limitations

Data were collected using self reported measures, in a cross-sectional survey.

#### Research/Practical Implications

Our findings have implications for designing interventions aiming at improving patients' safety and quality of care.

#### Originality/Value

Our study helps understanding the intricate relationships between Patients' Safety Culture dimensions and Suboptimal Care.

### The mediating role of social work characteristics in the relationship between transformational leadership and safety performance

Ilse Lievens (Univ. of Ghent, BE) [IlseM.Lievens@UGent.be](mailto:IlseM.Lievens@UGent.be), Peter Vlerick (Univ. of Ghent, BE)

#### Purpose

Previous research has documented the positive impact of transformational leadership on several job related outcomes such as safety

performance. Fewer attention has however been placed on the mechanisms that potentially influence this relation. Piccolo and Colquitt (2006) suggest that two mechanisms can explain the relation between transformational leadership and various forms of performance: a direct link, and an indirect link via perceived work characteristics. Continuing on their research, this study will extend this avenue by exploring the mediating role of a specific type of work characteristics namely social characteristics as defined by Morgeson and Humphrey (2006). We hypothesize that social characteristics will mediate the positive relationship between transformational leadership and the two dimensions of safety performance, safety compliance, and safety participation.

#### Design/Methodology

Data were collected in a Belgian nurse sample (N = 152). The multi-step procedure for mediating effects of Baron and Kenny (1986) was applied to test our hypothesis.

#### Results

The meditation hypothesis was supported for safety participation, but not for safety compliance.

#### Limitations

The current research was conducted within a single occupational group, results are based on self-reported data, and the research design was cross-sectional.

#### Research/Practical Implications

Head nurses should be encouraged to learn and actively implement a transformational leadership style as this can directly, and indirectly via social characteristics, enhance nurses' safety performance.

#### Originality/Value

To our knowledge, this study is the first to examine the role of social characteristics in

the transformational leadership – safety performance relation.

### **Working in hostile environment. A comparison between professional and recreational divers**

*Harald Ege (Prima Associazione Italiana contro Mobbing e Stress psicosociale, IT) [harald.ege@iol.it](mailto:harald.ege@iol.it)*

#### Purpose

Despite the progress of technology, know-how and professional education, underwater accidents happens regularly, often with deadly consequences.

The objective of this study is to contribute in preventing diving accidents for professional and recreational divers by understanding the psychologically critical phases of diving. It also aims to create a safe working place for professional divers.

#### Design/Methodology

The study is based on personal interviews with divers and analysis of underwater accidents and it is divided in two parts: the different motivation and fidelity of professional and recreational divers and the different level of excitement and anxiety before and during diving.

#### Results

The results are basically three: 1) Professional divers endure the most stressing situation because of the responsibility of their job, while recreational divers are under stress due to the environment. 2) Recreational divers are generally most distressed before diving and calm down when they get under water, while professional divers endure more stress during the immersion. 3) Recreational diver is basically interested in the environment, while professional divers pay more attention to the persons.

#### Limitations

The research is based on the peculiarity of diving experience and therefore not suitable for other hostile workplaces.

#### Research/Practical Implications

Basing on these results, professional divers can be aware of the different phases of diving, obtaining capacity of intervention and prevention of anxiety and panic attacks.

#### Originality/Value

Diving psychology is a huge field of study not yet fully explored. Researches on professional divers (instructors and guides) have full title to be included into Work Psychology.

### **Psychosocial safety climate and psychological risk prevention at work**

Javier Cerrato (Univ. of Basque Country, ES)  
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#### Purpose

This study aims to test the relationship between psychosocial safety climate (Idris, Dollard y Coward, 2012) and prevention of psychosocial risk factors at work as predicted by work satisfaction and work stress. We define psychosocial safety climate as the level of psychosocial risk factors in the work environment as workers experience it and their perception about this experience in mate and about the management commitment towards psychosocial risk prevention.

#### Design/Methodology

The sample comprises 70 workers, 34.3% from the cleansing sector and 65.7% from the metal industry sector. Data were collected by means of a questionnaire containing three different scales: Perception of Psychosocial Risk Factors at Work Scale, designed specifically for this study; the Work Satisfaction Scale (Warr, Cook

& Wall, 1979); the Work Tension Scale (House & Rizzo, 1972).

#### Results

The ANOVAs carried out show that when workers perceived a negative psychosocial safety climate they have a lower level of job satisfaction and the job stress is higher and job satisfaction is lower. Regarding laboral settings in cleansing workers job satisfaction is lower and stress level is much higher than in metal ones (4.4. vs 2.7). Even though the higher stress level and the lower work satisfaction level in cleansing workers, there are no differences regarding psychosocial safety climate.

#### Limitations

The Cross-sectional methodology used and the size of sample.

#### Research/Practical Implications

Implementing organizational measures of psychosocial risk prevention could improve the psychosocial well-being of workers in organizations.

#### Originality/Value

The psychosocial safety climate could be a predictor of psychosocial risk factors in organizations at a individual level.

### **Work-related stress mediate the relationship between safety climate and safety performance**

Margherita Brondino (Univ. di Verona, IT)  
[margherita.brondino@univr.it](mailto:margherita.brondino@univr.it), Anna Paolillo (Univ. di Verona, IT), Margherita Pasini (Univ. di Verona, IT), Gianluigi Lazzarini (Univ. di Verona, IT), Luciano Romeo (Univ. di Verona, IT)

During the last few years the approach to prevention of injury has focused more on the human factor, highlighting the important role that work-related stress, safety climate and safety culture play in preventing work accidents (Fogarty, 2004). The main aim of the



present study was to test Fogarty's (2004) proposition that the link between safety climate and errors is mediated by psychological health and that psychological stress has an important role as being among the immediate causes of accidents.

For these reasons safety climate, safety performance and work-related stress were assessed in 98 metal and mechanical workers employed in two different companies in the north-east of Italy. The validated Integrated Organizational Safety Climate Questionnaire was used to assess three safety climate measures (Organizational, Supervisor and Co-worker). Each item on each measure has a 7-point scale that ranges from 1 = never to 7 = always. The Italian version of the HSE Management Standards Indicator Tool was used to assess work related stress. Each item has a 5-point scale that ranges from 1 = never to 5 = always.

A Structural equation model showed that work related stress seemed to mediate the relationship between safety climate and safety performance. More data must to be collected to confirm the model.

The results suggest the importance for management to monitor both safety climate and individual health variables to avoid accidents and errors.



# 13. Macro- ergonomics / Work design

## Invited Symposia

### What Can We Expect Job Redesign to Deliver?

Session Chair: *Kevin Daniels (Univ. of East Anglia)*  
[kevin.daniels@uea.ac.uk](mailto:kevin.daniels@uea.ac.uk)

#### State of the Art

Job redesign remains one of the major areas in which work and organizational psychologists can make a contribution to the economy and society. In the first presentation of this symposium, Hughes and Clegg outline the state of the art of job design research, looking forward to how job design research can reinvigorate itself theoretically and in its practical contribution in different ways and in different areas. Hughes and Clegg set the context for the remaining presentations.

#### New Perspective/Contribution

Three empirical contributions to the symposium outline new, specific contributions to job redesign. Abildgaard and Nielsen show how researching the socio-cognitive processes of those receiving job redesign interventions enhances our understanding of the evolution and implementation of job redesign. Demerouti takes the influential of concept job crafting and shows how an innovative training intervention could encourage workers to improve the experience of their jobs. Christina et al. assess a job redesign intervention to improve the energy efficiency of retail stores, thus extending job design research's traditional foci to examining issues concerned with

organisations' contribution to addressing global warming.

#### Conclusion and Implications for Research/Practice

Following Hughes and Clegg's identification of opportunities for job redesign, the other presentations enhance our understanding job redesign and the scope of its application, in terms of the theoretical processes underpinning job redesign (sensemaking, Abildgaard and Nielsen), the range of interventions possible (job crafting, Demerouti) and the areas in which job redesign can make a contribution (sustainability, Christina et al).

### ***Presentations of the Symposium***

#### **What can we expect job design to deliver?**

*Lucy Elisabeth Bolton (Leeds Univ. Business School)*  
[l.bolton@lubs.leeds.ac.uk](mailto:l.bolton@lubs.leeds.ac.uk), *Helen Hughes (Univ. of Leeds)*, *Chris Clegg (Univ. of Leeds)*, *Processes of sensemaking and translation in an organization level intervention project*, *Johan Simonsen Abildgaard (Univ. of Copenhagen)*  
[Johan.Abildgaard@psy.ku.dk](mailto:Johan.Abildgaard@psy.ku.dk), *Karina Nielsen (National Research Centre for the Working Environment, DK)*

#### State of the Art

In this presentation, we argue that job design, as a subject domain, has the opportunity to move on from its traditional focus based on elaborations of the job characteristics model which has dominated academic debates for several decades. The field has been in danger of becoming moribund, with significant fragmentation between those researching the area and those in organisations managing and undertaking the praxis of designing jobs.

**New Perspective/Contribution**

We identify several interdependent opportunities for development:

- To consider job design in new problem domains (such as sustainability, resilience, assistive living);
- To examine the linkages with new, emerging business models (including, for example, servitisation through 'power by the hour');
- To understand informal and localised job design through processes such as job crafting and role adjustment (e.g., Wrzesniewski & Dutton, 2001);
- To incorporate the notion that job design is also a dependent variable, using circular models (as exemplified by Clegg & Spencer, 2007);
- To understand the added economic and business value of job design (as exemplified by Birdi et al, 2008).

**Research/Practical Implications**

We identify opportunities:

- To deploy additional research methods such as Social Network Analysis and Agent Based Modelling (see, for example, Hughes et al, 2012);
- To develop tools that allow practitioners to design new work organisations and ways of working.

**Originality/Value**

We argue that all of the above will serve to re-invigorate the area theoretically and, equally important, provide practical support for those actively engaged in the praxis of job design.

## **Bottom-up job (re)design: The test of a job crafting intervention among police officers and health care professionals**

*Evangelia Demerouti (Eindhoven Univ. of Technology) [E.Demerouti@tue.nl](mailto:E.Demerouti@tue.nl)*

**Purpose**

Job crafting refers to proactive and voluntary adjustments that individuals make in their work to make work more meaningful and satisfying. According to the Job Demands Resources model workers can increase resources, increase challenging demands, and decrease hindering demands. No research so far has explored whether organizations can stimulate job crafting behavior in their employees and what the effects of such behavior would be. The aim of this study is to examine the impact of a job crafting intervention that was applied among (1) police officers in order to increase their well-being and (2) health care professionals in order to increase their adaptive performance (i.e. monitor elderly patients).

**Design/Methodology**

A nonrandomized control group pretest-posttest design was utilized. Participants in the experimental group followed a training program in which they specified a personal crafting plan (self-set crafting goals) that they would achieve in the weeks following training.

**Results**

Repeated measures analyses showed that the group factor was not significant for the police sample. T-tests showed, however, that the well-being, self-efficacy and job resources of the experimental group increased during the post-measure. Repeated measures analyses showed that, compared to the control group, the experimental group of health care professionals reported more crafting, well-being and adaptive performance.

### Limitations

The small sample and the reliance on self-report measures may be a limitation.

### Research/Practical Implications

Organizations can intervene in job crafting behavior of their employees and interventions are more successful when they are specific.

### Originality/Value

This is the first intervention study on job crafting.

## Achieving energy usage goals in retail stores through job design: A preliminary model

*Sian Christina (Loughborough Univ.) [sianchristina@gmail.com](mailto:sianchristina@gmail.com), Andy Dainty (Loughborough Univ.), Patrick Waterson (Loughborough Univ.), Kevin Daniels (Univ. of East Anglia)*

### Purpose

Energy use in organisations has far-reaching climate-related and financial implications. In a large retail organisation, we examined the role of shop-floor workers in reducing energy consumption through both personal behaviour and in interaction with existing technology. We developed a model to consider how job design and organisational goal-setting work together around energy reduction. Organisational changes were subsequently developed to comply with the principles of the model.

### Design/Methodology

Ten focus groups were held with a total of 70 participants. We followed up subsequent changes in organisational job design with interviews with ten retail managers.

### Results

The research enabled us to adapt principles from existing goal-setting and sustainability theory to apply to energy goal-setting in retail organisations. This capacity to model goal-setting and job design has led to job design changes across a large number of retail stores

in the participating organisation. Full data is still being collected around the impact of these changes, but qualitative feedback from managers is discussed.

### Limitations

This study is purely focused on one retail organisation, so may not be completely generalizable to other types of business.

### Research/Practical Implications

The study suggests that to achieve energy-reduction goals, organisations should consider a socio-technical approach to incorporating energy goals into formal job design, rather than relying on informal awareness raising and 'do your best' approaches.

### Originality/Value

The present study is one of the few to look at energy reduction goals in organisations through job design and staff behaviours. An original model is also described to illustrate this direction.

## Comprehensive Work Design Analysis – Insights from Around the Globe

### SIOP-IAAP-EAWOP Alliance Symposium

Session Chair: *Sebastian Stegmann (Goethe Univ.) [stegmann@psych.uni-frankfurt.de](mailto:stegmann@psych.uni-frankfurt.de)*

### State of the Art

Contemporary work design research tends to focus on few work characteristics and their effects in isolation. In other fields of research a limited set of work characteristics is frequently used in an undifferentiated, additive manner. Although there exist various translations of established work design instruments in different languages, a true account of inter-cultural issues in work design is still lacking.

### New Perspective/Contribution

This symposium is hosted by a network of researchers who aim to explore the intercultural dimension of work design. The work design questionnaire (WDQ, Morgeson & Humphrey, 2006) acts as the common “toolbox” of the network. The WDQ comprises an exceptionally comprehensive set of 21 distinct work characteristics and has outstanding psychometrical properties. It has been translated into various languages, with more translations to come. It is currently applied all over the world, offering a huge chance to study work design research globally. Besides the presentation of new translations and results from different countries, the symposium will offer insights regarding how the various work characteristics interact, how they can be used to create clusters of jobs, and regarding the processes mediating their effects.

### Conclusion and Implications for Research/Practice

The audience will have the opportunity to gain insight into and compare work design research conducted on different continents - Europe, North, and South America. The interaction of work characteristics and the clustering of jobs offer important implications for work design research and interventions. There will be time to discuss and compare insights from the different countries.

## ***Presentations of the Symposium***

### **From individual work characteristics to work design configurations**

*Frederick P. Morgeson (Michigan State Univ.)*  
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#### Purpose

Work design research has focused on “individual” work characteristics, yet there may be unique configurations. We sought to explore this possibility.

### Design/Methodology

We used the Work Design Questionnaire to assess 18 work characteristics and associated outcome measures. The sample consisted of job incumbents (N = 2,518) and their supervisors.

### Results

Eight work design configurations were identified. Social butterfly (N = 598): Autonomous and interdependent work, high social support and interaction outside the organization, low task identity and equipment use. Connected knowledge master (N = 407): Highest in knowledge, complexity, variety, and social support. Diverse demanding specialist (N = 277): High variety, specialization, interdependence, and physical demands. Craftsman (N = 166): High equipment use and task identity. Average Joe (N = 600): Simple work, moderate social support, and low task identity. Isolated contributor (N = 145): Autonomous, moderately complex work with little interdependence. Simple hard laborer (N = 109): Simple, physically demanding work, poor work conditions, and low autonomy. Dead-enders (N = 146): Low complexity, skill, autonomy, and interdependence, with moderate physical demands and work conditions.

### Limitations

Limitations include potential common source biases and concerns about causal ordering.

### Research/Practical Implications

This research contributes to an understanding of the form that modern work takes. Links between configurations and outcomes informs decisions about how to design work.

### Originality/Value

No prior research has examined work design configurations. In addition, little research has explored such a wide range of work characteristics and their connection to a diverse set of outcomes.



## Validation of the Italian version of the Work Design Questionnaire

Sara Zaniboni (Univ. of Trento) [Sara.Zaniboni@unitn.it](mailto:Sara.Zaniboni@unitn.it), Donald M. Truxillo (Portland State Univ.), Franco Fraccaroli (Univ. of Trento)

### Purpose

The aim of the present study was to validate the Italian version of the Work Design Questionnaire (WDQ) in terms of its factor structure and relationship to attitudinal and perceptual outcomes. We also explored how interactions between WDQ dimensions can predict worker outcomes such as turnover intentions.

### Design/Methodology

A sample of 419 workers in Italy in different employment sectors completed the Italian version of the WDQ at Time 1. At Time 2 (3 weeks later), 375 of these completed a survey of job satisfaction, work self-efficacy, job-related tension, and intentions to quit their organization.

### Results

CFAs were conducted on the WDQ subscales. The models showed good fit. For the 21 WDQ dimensions, the composite reliabilities ranged from .70 to .94, and the average variance extracted from .47 to .82. The 21 dimensions of the WDQ showed a number of statistically significant relationships with the attitudinal outcomes, and the pattern of relationships with the outcomes was as expected. Moreover, significant interactions were found between the WDQ dimensions, affecting the work outcomes in predictable ways. For example, job complexity interacted with work scheduling autonomy and with social support to affect intentions to quit.

### Limitations

The major limitation is the use of only self-report data.

### Research/Practical Implications

The study shows the validity of a comprehensive tool that can be used to assess job characteristics for research and practical purposes in Italian language contexts.

### Originality/Value

Understanding of the moderators of work design dimensions has significant implications for organizations considering trade-offs.

## The Work Design Questionnaire: Spanish version and adaptation

Jaime Andrés Bayona (Pontificia Universidad Javeriana) [jaime.bayona@javeriana.edu.co](mailto:jaime.bayona@javeriana.edu.co), Amparo Caballer (IDOCAL Univ. de Valencia), José María María Peiró (IDOCAL Univ. de Valencia & IVIE)

### Purpose

The Work Design has been expanded the range of work characteristics considered in their models, the Work Design Questionnaire (WDQ), developed by Morgeson & Humphrey (2006) is the most comprehensive work design questionnaire; it presents a 21-factor structure that covers four general work-characteristics: task, knowledge, social and context characteristics. Till present, its structure has only been tested in OECD countries, with no validation on other cultural contexts.

### Design/Methodology

To test this questionnaire, we used the answers to the Spanish version of the questionnaire from 550 Colombian full-time workers of different organizations, sectors and occupational levels, 4, 18, 19, 20 & 21 factor structures were tested using CFA, average reliability and construct validity are also detailed.

### Results

Internal consistency for the WDQ was .90. 21 factors structure showed the best fit indexes:  $\chi^2/df$  ratio: 2.014, SRMR: .06, RMSEA: .44 CFI: .88. Additional support for construct validity was also found from significant differences among operational, clerical, and professional

workers in autonomy  $F[(2,520)=39,52,p<0,01]$ , knowledge characteristics  $F[(2,520)=33,78,p<0,01]$ , physical demands  $F[(2,518)=103,53,p<0,01]$ , and work conditions  $F[(2,519)=39,95,p<0,01]$ .

#### Limitations

As only 50% of the labor market in Colombia is formal it remains to be tested the proposed structure in other labor structures.

#### Research/Practical Implications

These results imply that the WDQ 21-factor structure could be applicable to non-OECD countries.

#### Originality/Value

To our knowledge, the study is the first to validate this scale in a developing country context.

### **Why do work characteristics affect us? A comparison of classic critical psychological states and modern self-determination-related need fulfillment**

Sebastian Stegmann (Goethe Univ.)  
[stegmann@psych.uni-frankfurt.de](mailto:stegmann@psych.uni-frankfurt.de), Sebastian Schuh (Goethe Univ.)

#### Purpose

Whereas work characteristics have been found to strongly affect central employee outcomes, the mediating processes behind these effects are much less understood. Hence, we examined the mediating links between a comprehensive set of work characteristics and employees' attitudes, behaviors, and health. Doing so we compared traditional mediators specified by the job characteristics model with mediators from self-determination theory's basic needs framework.

#### Design/Methodology

German employees ( $N > 200$ ) from a wide spectrum of organizations and occupations participated in a lagged online study. Work characteristics were assessed using the Work

Design Questionnaire (T1). Mediators were measured three weeks later (T2) and outcomes yet another three weeks later (T3).

#### Results

As in previous research, work characteristics had strong effects on diverse employee outcomes. Importantly, results revealed that both traditional mediators and basic needs complemented each other and explained unique variance. Moreover, results indicated a differential pattern of mediating processes for different types of outcomes.

#### Limitations

Each construct was assessed at one point in time only.

#### Research/Practical Implications

Understanding mediating processes is seen as a crucial step for further development of work design theory. Moreover, the knowledge of the processes mediating the effects of work design is essential for the justification of interventions.

#### Originality/Value

Research on this topic has operated often with a limited set of work characteristics and mediators. Our study involves a more comprehensive set of task, knowledge, and social work characteristics. Furthermore, we combine self-determination theory with work design research – two influential yet relatively separate strands of research.

## A Cross-Cultural Work Design Research Incubator

### *SIOP-IAAP-EAWOP Alliance Symposium*

Session Chairs: Rolf van Dick (Goethe Univ., DE) [van.Dick@psych.uni-frankfurt.de](mailto:van.Dick@psych.uni-frankfurt.de), Sebastian Stegmann (Goethe Univ., DE) [stegmann@psych.uni-frankfurt.de](mailto:stegmann@psych.uni-frankfurt.de)

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#### Description and Purpose

Work design is an essential area of research in Industrial and Organizational Psychology. Literally thousands of studies have shown meaningful links between various work design features and individual and organizational outcomes (Humphrey, Nahrgang, & Morgeson, 2007). Given its importance, work design research is critical to both theory and practice alike.

Yet, despite this impressive body of research, there are two key historical weaknesses in the work design literature. First, past research has typically focused on an incomplete set of work characteristics (Morgeson & Campion, 2003). This has resulted in a curiously narrow empirical literature, where only a small set of work characteristics have received wide-spread investigation. Fortunately, recent empirical and conceptual research has sought to expand the domain of work design (Grant, 2007; Morgeson & Humphrey, 2006). This recent research has led to the development of the Work Design Questionnaire (WDQ), a comprehensive measure of work design that has been used in numerous global contexts, including research conducted by all of the facilitators. By using the same measure across cul-

tures, cross-cultural comparisons are more readily made. Second, although work design research has been conducted around the globe, there exists a relatively small body of cross-cultural research. This is unfortunate because it is unknown (a) how workers in different cultural contexts react to the same work design features and (b) how distinctive cultural values might shape work designs and the functional relationships between work design features and outcomes.

The proposed research incubator is designed to create conversation on cross-cultural work design research that can help guide future studies beyond this session. An international team of experts on the topic will serve as facilitators, identifying key areas that require attention in the field, providing feedback and research ideas, and encouraging international collaborations. In so doing, the goal of this incubator is to provide participants with an outlet where they can draw from the experiences of the facilitators and engage in a conversation to develop a research agenda for cross-cultural work design. During the session, participants will share their interests in the topic, explore major issues and trends in the area, narrow their focus to specific research questions and hypotheses, and identify action plans for research that has the potential to produce publications in top-tier Work, Industrial, and Organizational Psychology, and Management journals. To encourage on-going collaborative efforts, a list will be distributed to participants that contain attendees' contact information and research project interests.

Anyone who is interested in participating in research on cross-cultural work design is encouraged to attend. Our intent is to develop research connections among scholars who are interested in addressing pressing work design questions from a cross-cultural perspective.

The session will therefore provide the ideal forum for partnerships to be made among (1) established and newly emerging researchers, (2) researchers interested in integrating work design concepts into different substantive areas (e.g., stress, culture, attitudes, selection, leadership), (3) academics and practitioners, and (4) researchers from different geographical locations.

## Posters

### Investigating an expanded model of work characteristics: The IGLO model

#### ***Nominated for the EAWOP Congress 2013 Best Poster Award***

*Jon Anders Lone (Univ. of Oslo, NO) [j.a.lone@psykologi.uio.no](mailto:j.a.lone@psykologi.uio.no), Trond Myklebust (Norwegian Police Univ. College, NO), Roald Bjørklund (Univ. of Oslo, NO), Cato Bjørkli (Univ. of Oslo, NO)*

#### Purpose

The aim of the present study was to empirically examine an expanded model of work characteristics, the IGLO model, based on the work design models of Parker et al. (2001) and Morgeson & Humphrey (2008).

#### Design/Methodology

We conducted qualitative open-ended interviews with fifty-one participants at two employee levels (thirty-five managers and sixteen employees) in sixteen Norwegian police districts. The interviews were content-analysed and coded on the four organizational levels of work characteristics in the IGLO model; the individual, group, leadership, and the organization level, and on two established work environment models, the Job Characteristics Model (JCM) and the Organizational Climate Measure (OCM).

#### Results

The results showed that that all the organizational levels captured interview statements. Moreover, the findings indicated that the IGLO model was sensitive to differences between the two employee levels. The results also suggested that the levels of work characteristics converged with the conceptual focus of the OCM, but not the JCM.

#### Limitations

The sample was non-random, and from one single organization. In addition, we were not able to test different alternative models with our methodological approach.

#### Research/Practical Implications

Taken together, the study provides preliminary empirical support for an expanded model of work characteristics, including the individual, group, leadership, and organization levels.

#### Originality/Value

There are to our knowledge few recent empirical studies that have examined whether existing models of work characteristics are valid representations of how work is experienced. Secondly, it is possible that the models should be further refined or expanded. The purpose of this study is to address these research gaps.

### **Experimental evidence for the effects of task repetitiveness on mental strain and work performance**

*Jan Häusser (Univ. of Hildesheim, DE) [haeusser@uni-hildesheim.de](mailto:haeusser@uni-hildesheim.de), Stefan Schulz-Hardt (Univ. of Göttingen, DE), Thomas Schultze (Univ. of Göttingen, DE), Anne Tomaschek (Univ. of Dresden, DE), Andreas Mojzisch (Univ. of Hildesheim, DE)*

#### Purpose

Previous research provides inconsistent findings about the effects of task repetitiveness on mental strain and well-being. In particular, clear-cut evidence for causal relationships is still missing, since experimental studies are sparse. Therefore, we aimed at providing an

experimental test of the effects of task repetitiveness on mental strain and work performance in two workplace simulations.

#### Design/Methodology

In Experiment 1, participants worked at a computer workstation and completed customer requests. In Experiment 2, participants worked at an assembly line, piecing together equipment sets for furniture. Repetitiveness of tasks was manipulated without varying related adverse work characteristics (e.g., skill discretion), thereby avoiding the typical confounds of earlier research.

#### Results

The results from both experiments consistently show that high task repetitiveness negatively impacts on mental strain. In contrast, quantitative performance increased under conditions of high repetitiveness, pointing to larger learning effects.

#### Limitations

A workplace simulation can never fully cover all relevant facets of real life workplaces, particularly the prolonged exposure and the psychological meaning of the job.

#### Research/Practical Implications

Results suggest that work-design interventions that increase the variety of similar-level tasks (e.g., job enlargement) may have a positive effect on well-being even if qualitative aspects of the job such as planning and controlling work remain unchanged.

#### Originality/Value

Our findings provide experimental and unfounded evidence for the effects of task repetitiveness on mental strain and work performance.

### **Subjective system of criteria for controlling by managers effectiveness of their activities as an obstacle for meeting new labor requirements**

*Fayruza Ismagilova (Ural Federal Univ., RU) [ismagilova.f@gmail.com](mailto:ismagilova.f@gmail.com), Galina Miroliubova (Ural Federal Univ., RU)*

#### Purpose

The purpose of this research is to find out to what extent subjective criteria for controlling and assessing effectiveness of managerial activities used by managers meet new labor requirement.

#### Design/Methodology

Content-analysis of results of a written poll of managers was carried out. During a forming experiment a hypothesis of the influence of the degree of activities standards interiorization on the ability of managers to work out control criteria that are adequate to activities was checked.

#### Results

Often managers substitute criteria of professional activities by criteria of economic and organizations effectiveness. Criteria of profitability growth and criteria of costs decrease are mostly not coordinated. In the set of criteria for controlling activities they are represented by two independent groups. More often managers control activities supporting a significant strategy of an organization but not activities aimed at organizational changes. Prevalence of unmeasurable criteria does not allow managers to objectively assess effectiveness of their own activities and becomes an obstacle on their way of mastering new means of activities.

#### Limitations

A Russian managerial practice is mostly oriented on using existing competitive advantages but not on an innovative search and innovative development.

#### Research/Practical Implications

The research results can be used in life-long learning programs for managers who have managerial experience. Developed methods of training help managers to form criteria for assessing effectiveness of newly mastered ways and styles of work.

#### Originality/Value

A subjective system of criteria for controlling effectiveness of managers' activities based on the results of the research reflects new trends in professional activities of managers in changing social and economic conditions.



# 14. Organizational behavior

## Invited Symposia

### Trust and HRM: New Insights and Perspectives

Session Chair: *Rosalind H Searle (Coventry Business School)* [rosalind.searle@coventry.ac.uk](mailto:rosalind.searle@coventry.ac.uk)

Until recently there has been little systematic consideration of the relationship between Human Resource Management (HRM) and trust (exception see Searle and Skinner, 2011). This is a significant omission as HRM are amongst the most influential organisational policies for trust (Robinson and Rousseau, 1994). In this symposium we showcase some new developments in this field with four papers illuminating distinct aspects, raising practical issues and research agendas. We commence with Kidron, Tzafrir, & Meshoulam's study of HR professionals in Israel and the role of trust for integration. In the second Weibel et al use three distinct studies to unpack the relationship between trust and control and disentangle this complex relationship to show the conditions under which control can sustain trust – particularly regarding reputation and fairness. Finally specific HR policies are considered with two papers. Next Crawshaw considers cultural dimensions and attitudes towards career progression in a mediated-moderation model test of whether employees with careerist perspective hold significantly lower levels of trust in management. Finally, Searle, Hope-Hailey and Dietz look at downsizing, and though comparing three distinct case studies reveal how, handled properly, employees trust can be enhanced through a firm's downsizing efforts,

some effective repair tactics and how to maximise a breach!

The symposium offers a variety of approaches to studying this topic and reveals its value and import for I/O psychology and organisations.

This invited symposium will involve individual papers (20 min) for their presentation and questions, then general audience participation and questions facilitated by the chair (10 min).

### ***Presentations of the Symposium***

#### **Trust, differentiation and integration within HRM subsystem and HRM effectiveness**

*Aviv Kidron, (The Academic Yezreel Valley College, IL) [avivb@yvc.ac.il](mailto:avivb@yvc.ac.il), Shay Tzafrir, (Univ. of Haifa, IL), Ilan. Meshoulam (Univ. of Haifa, IL)*

#### **Purpose**

The purpose of the study was to test the relationship between trust, differentiation, internal integration within HRM subsystem (IIHRMS), and HRM effectiveness.

#### **Design/Methodology**

A research survey was carried out among 233 HRM professionals from 29 HRM subsystems.

#### **Results**

Differentiation and trust among HRM staff have a positive correlation with IIHRMS. Specifically, trust proved to demonstrate the strongest correlation with IIHRMS. IIHRMS is positively correlated with strategic HRM effectiveness, but is not correlated with technical HRM effectiveness.

#### **Limitations**

Future research should expand the sampling and include more companies from various countries.

### Research/Practical Implications

The study contributed to the understanding of the sub-functional level as a whole and not each practice by itself. From practical point of view, the findings provide evidence to suggest that if trust in HRM staff is high, organizations may benefit from the integration of HR department. Due to the significance of trust among HRM coworkers and its importance for achieving IHRMS, it would be reasonable for the HRM subsystem to develop and embrace a climate of trust among its staff members. Further research is needed in order to provide more insight on the topics involved. For example, future studies should investigate international HRM subsystem, and identify the application of integration at the international level.

### Originality/Value

The relationship between trust, differentiation, integration within HRM subsystem, and HRM effectiveness has not been studied. An examination of the relationship between IHRMS and HRM effectiveness may strengthen awareness of IHRMS as a factor that may influence HRM effectiveness.

### Control as a driver of employee trust in the organization?

*Antoinette Weibel, (Univ. of Konstanz, [antoinette.weibel@uni-konstanz.de](mailto:antoinette.weibel@uni-konstanz.de)), Deanne den Hartog (Amsterdam Business School), Nicole Gillespie (Univ. of Queensland), Rosalind Searle (Coventry Business School), Denise Skinner (Coventry Business School), Frederique Six (Free Univ. Amsterdam)*

### Purpose

A wide range of events have eroded stakeholders' trust in organizations (Kramer & Lewicki 2010), consequently there is a growing demand for stricter regulation and governance of companies, influencing organizational and HR control systems increasing formalization, tightening evaluation practices, and re-

vising reward and sanctioning systems. Yet, it is unclear whether and how controls affect employee trust in their organization. Using three studies we examine this issue.

### Design/Methodology

We developed a theoretical model which posits organizational control as positively related to employees' competence and goodwill trust in their organization, identifying two potential mediators: procedural justice and organizational prestige.

### Results

Using a survey of 787 managers/professionals our mediated model is supported and post-hoc interviews confirm controls impact positively on trust, facilitating fair and supportive treatment of employees, and enhance organization's prestige and competence.

### Research/Practical Implications

We reveal how both "coercive-bureaucracies" and badly executed systems undermine trust.

### Trust and careerist orientations to work: A comparison of UK and Indian employees

*Jonathan Crawshaw (Aston Business School) [j.r.crawshaw2@aston.ac.uk](mailto:j.r.crawshaw2@aston.ac.uk)*

### Purpose

Extant research suggests that careerist orientated employees hold significantly lower levels of trust in management, expectations regarding career development, and affective organizational commitment than their non-careerist counterparts. To date, however, no research has so far explored the potential for cultural differences in the relationships between careerist orientation and these important work/career-related attitudes and behaviours. Building on social exchange theory, we tested a mediated-moderation model. First, we hypothesized that the negative relationships

between employee careerist orientation and their trust in management, expectations regarding career development, and affective organizational commitment will be significantly stronger for the more individualistic UK, rather than collectivist Indian, employees. Second, we predicted that trust in management would mediate the relationship between this interaction of careerist orientation and nationality (culture) and employees' expectations regarding their career development and organizational commitment.

#### Design/Methodology

Hypotheses were tested using survey data provided by 279 employees (UK = 170; Indian = 109) employees from across the finance, IT and petrochemical industries.

#### Results

Moderated and mediated regression analyses, conducted with SPSS version 20, found support for all hypotheses.

#### Limitations

Future research may look to measure cultural dimensions such as individualism and collectivism and utilize longitudinal research designs.

#### Research/Practical Implications

These findings may be particularly important for those managers involved in the career management of a culturally diverse workforce.

#### Originality/Value

To our knowledge, this study is the first to test for cultural differences in the implications of careerist orientations for these important work/career-related attitudes and behaviours.

### **Downsizing and organizational trust: How to design and deliver HR systems that avoid breach, or repair effectively**

*Rosalind Searle (Coventry Business School)*  
[rosalind.searle@coventry.ac.uk](mailto:rosalind.searle@coventry.ac.uk), *Veronica Hope-*

*Hailey (Bath Management School), Graham Dietz (Durham Business School)*

#### Purpose

This paper examines the process of internal organisational trust repair following the financial crisis and considers managers and employee perceptions of process effectiveness. We focus on employees' trust in their employer, and hence the perceived trustworthiness of this organization. We consider the specific employee-employer relationship and especially the role and interventions of HR.

#### Design/Methodology

We analyze qualitative data collected from 3 case study organisations collected in autumn 2011. Using content analysis of interviews with managers and focus groups of employees we reveal key differences and the approach taken and their impact. Each case considers the same HR objective – downsizing – but which illustrate three different scenarios:

#### Results

In RETAIL a potential trust breach is averted and trust strengthening through an ingrained and integrated approaches. In contrast, BANKGROUP, an organisation responding to its own collapse and the broader financial crisis, suffers considerable breach of trust amongst employees, but also customers and communities, however the new senior team worked actively and systematically to repair through attending to distrust regulation and demonstrations of trustworthiness. Finally, NATGOV a public sector organization created a breach of trust from the onset of downsizing, and whose repair methods only exacerbated the situation for an already distrusting workforce.

#### Research/Practical Implications

We reveal that trust breach is not enviable in downsizing and compares and contrasts successful and unsuccessful trust repair processes.

### Originality/Value

Given the paucity of field based studies, these case studies identify key differences in the organizations and the processes they deployed.

## Symposia

### Organizational Justice: A Multi-Method Approach

Session Chairs: *Carolina Moliner (IDOCAL, Univ. of Valencia)* [carolina.moliner@uv.es](mailto:carolina.moliner@uv.es), *Vicente Martínez-Tur (IDOCAL, Univ. of Valencia)* [vicente.martinez-tur@uv.es](mailto:vicente.martinez-tur@uv.es)

#### State of the Art

Despite research on organizational justice has risen to become a key aspect within the organizational sciences, the field continues to expand through the use of several complementary research methods. The present symposium aims to contribute to the development of the area by presenting a collection of studies that reflect this diversity of research methods, including field and experimental designs, a qualitative approach, multi-source and multi-wave data, and samples from several countries.

#### New Perspective/Contribution

The symposium includes six contributions. First, Game and Crawshaw examine the moderating role of national culture in the relationship between global attachment orientations and employee perceptions of interpersonal justice. Second, Giovanni, Pini, and Savignano examine the effects of different elements of a performance appraisal system (performance rating formats, participant's voice, and results) on equity perceptions. Third, Molina, Moliner, and Martínez-Tur explore justice climate and peer justice, two sources of collective fairness, as precursors of unit-level trust in the supervisor. Fourth, Paddock and Lu examine the impact of managers' just behaviours on manag-

ers' and subordinates' creativity. Fifth, Patient and Saldanha explore the effect of different contexts on communicator interactional justice when giving bad news. Finally, Patient, Cojuharenco, and German explore the effect of communicator hierarchical position on interpersonal justice perceptions and decision acceptance.

#### Research/Practical Implications

The symposium and the international presenters provide a great deal of data to discuss theoretical and practical implications at different levels of analysis, regarding different sources of justice, considering moderators such as LMX and climate-strength, and outcomes such as creativity and trust, among other things.

### ***Presentations of the Symposium***

#### **Perceiving interpersonal justice: An investigation of the roles of attachment and cultural fit**

*Annilee M. Game (Univ. of East Anglia)* [a.game@uea.ac.uk](mailto:a.game@uea.ac.uk), *Jonathan R. Crawshaw (Aston Business School, Aston Univ.)*

#### Purpose

There is growing evidence for the importance of individual global attachment models in predicting important employee attitudes and behaviours at work, including perceptions of workplace fairness and justice. To date, however, few studies have explored the salience of cultural differences in these relationships. Drawing on the cultural fit hypothesis, we investigated the moderating role of national culture in the relationship between global attachment orientations and employee perceptions of interpersonal justice.

#### Design/Methodology

Three hundred and forty individuals from countries categorized (by GLOBE) as either low collectivistic 'Anglo' (e.g. UK, Australia: N =

205) or high collectivistic 'South Asian' (e.g. India, Malaysia: N = 135), responded to an online questionnaire. Hypotheses were tested using moderated regression analysis. SPSS version 20 was used for all analysis.

#### Results

As hypothesized, attachment anxiety and avoidance were negatively related to perceptions of interpersonal justice. Against expectations, these main effects did not differ between cultures. However, supplementary analysis revealed a significant 3-way interaction. When attachment anxiety was high, avoidance was a stronger predictor of interpersonal justice perceptions but the direction of this association differed by culture.

#### Limitations

Future research may look to measure cultural dimensions such as individualism and collectivism and utilize longitudinal research designs.

#### Research/Practical Implications

These findings are particularly important for those line managers working with, and in, culturally/nationally diverse contexts.

#### Originality/Value

To our knowledge, this study is the first to test for cultural differences in the relationships between individual global attachment models and interpersonal justice perceptions.

### **Performance appraisal and justice perceptions: A scenario-based experimental study**

Marco Giovanni Mariani (Univ. of Bologna) [marco-giovanni.mariani@unibo.it](mailto:marco-giovanni.mariani@unibo.it), Alessandro Pini (Univ. of Bologna), Elisa Savignano (Univ. of Bologna)

#### Purpose

An accurate and fair organization's performance appraisal system can improve motivation and development of employees (Ilgen et al., 1979); on the other hand, employees' frustra-

tion and extreme dissatisfaction can increase when appraisal system is biased and arbitrary (Skarlicki & Folger, 1997). Building on the organizational justice theory, we hypothesized that equity perceptions were influenced by: performance rating formats (Absolute vs relative), participants' voice (voice vs no voice) and results (positive vs negative).

#### Design/Methodology

A scenario-based experimental study was used to test these assumptions. The research involved 244 Italian participants from several organizational contexts recruited on web through an on-line questionnaire.

#### Results

The ANOVA analyses revealed that participants' voice (voice-modality) affected the equity perceptions. Particularly, participants in absolute rating format conditions and with positive results showed a higher level of procedural and interpersonal justice comparing for those dealing with an opposite situation. Furthermore we found significant results between participant's voice and rating results in relation to perception of distributive justice.

#### Limitations

The study relied on self-report data, and the descriptions of the company and the scenarios were hypothetical (though based on existing firms).

#### Research/Practical Implications

The findings of this study suggest the importance of participants' involvement in performance appraisal system.

#### Originality/Value

The most original element pertains to the set of variables which was analysed.

### **When do work-units trust their supervisors? A collective fairness approach**

Carolina Moliner (IDOCAL, Univ. of Valencia) [carolina.moliner@uv.es](mailto:carolina.moliner@uv.es), Agustín Molina (IDOCAL,

*Univ. of Valencia), Vicente Martínez-Tur (IDOCAL, Univ. of Valencia)*

#### Purpose

We explore justice climate (shared perceptions of how coworkers are treated by an authority figure; JC) and peer justice (shared perceptions of the extent to which coworkers treat each other fairly; PJ) as precursors of work-unit trust in the supervisor. Additionally, we examine the degree of within-unit agreement of climate perceptions (JC-strength / PJ-strength) as moderators of the previous relationships.

#### Design/Methodology

Data was collected in two waves separated by 4-months. The sample was composed by 49 Spanish centres for the attention to persons with intellectual disabilities. We ran two hierarchical linear regression analyses, one per source of justice.

#### Results

JC was significantly and positively related to work-unit trust in the supervisor, but both JC-strength and the interaction term (JC X JC-strength) failed to be significant. For PJ the interaction term (PJ X PJ-strength) showed a significant estimate. The relationship between PJ and work-unit trust in the supervisor increased when there is low PJ-strength, and decreased when there is high PJ-strength.

#### Limitations

The main limitation of the study relied on the nature of the data (self-reported measures).

#### Research/Practical Implications

In these organizations, work-unit trust in the supervisor might be achieved when authority figures provide fair treatment, but the manner in which coworkers treat each other has also an impact on this variable.

#### Originality/Value

Traditionally, organizational justice research focuses the attention on the organization and

the supervisors. However, our results indicated that (un)fair treatment workers receive from colleagues has a differential role in understanding trust.

### Managing justly and behaving creatively

*Layne Paddock (Singapore Management Univ.) [elpaddock@smu.edu.sg](mailto:elpaddock@smu.edu.sg), Serena Lu (Singapore Management Univ.)*

#### Purpose

We ask, "Does behaving in a just manner help or hinder managers' own creativity?" In doing so, we also investigate the role that managers' just behaviors play in their subordinates' creative behavior.

#### Study 1 Design

Study 1, a multi-source, multi-wave field study, includes 146 dyads of Singaporean managers and subordinates who each completed three surveys separated by two weeks. Just behaviors were measured at Time 2 and creativity was assessed at Time 3.

#### Study 1 Results

Results suggest that of interactional justice types previously shown to be important to creativity (George & Zhou, 2007), managers' informational justice behavior is especially important for both managers' own and their subordinates' creativity. Further, LMX (assessed at Time 1) plays a moderating role in this process.

#### Study 2 Design

Study 2, which is currently underway, is similar to Study 1 in structure and includes 175 dyads and affect measures expected to mediate justice behavior – creative behavior relationships.

#### Limitations

Limitations will be discussed, including the sampling method used and source of reported creative behavior.



### Implications

Findings contribute to the justice and creativity literatures, providing called-for additional research linking manager characteristics to employees' creativity (e.g., Tierney, Farmer, & Graen, 1999) and augmenting research on supportive supervision and employee creativity (e.g., George & Zhou, 2007). Practically, results suggest justice interventions (e.g., manager training) that will heighten workplace creativity, an increasingly important aspect of workplace performance.

### Value

We focus on managers' just behaviors (Scott, Colquitt, & Paddock, 2010) and whether these behaviors impact managers' own workplace creativity.

## **The effect of context on communicator interactional justice when giving bad news: A qualitative exploration**

*Maria Francisca Saldanha (Católica-Lisbon School of Business and Economics) [mfs@ucp.pt](mailto:mfs@ucp.pt), David Patient (Católica-Lisbon School of Business and Economics)*

### Purpose

A qualitative approach is used to explore strategies used to give bad news in two different contexts: 1) when the communicator is likely to be held partially responsible for the negative outcome, and 2) when the negative outcome is beyond the control of the communicator. We explore the effects of context on the use by communicators of interactional justice, in terms of both providing detailed explanation and demonstrating respect and concern.

### Design/Methodology

We conducted in depth interviews in two Portuguese organizations. In a healthcare organization, interviewees were five counselors tasked with communicating to clients whether they tested positive for a serious STD. In a

government agency, interviewees were five managers whose role included communicating details of a restructuring and downsizing to their supervisees. Interviews were coded and subsequently interpreted within our theoretical framework, with a focus on aspects of interactional justice. Insights were also generated regarding the interpretation of novel themes.

### Results

Although the importance to communicators of implementing interactional justice figured prominently in the interviews, the strategies for doing so varied according to context.

### Limitations

The communication strategies described could not be observed in practice, nor could recipient reactions be confirmed. Only two organizational contexts were sampled.

### Research/Practical Implications

Communicators consider interactional justice important, regardless of whether they are accountable for outcomes. Specific communication strategies used can depend on context.

### Originality/Value

Through analysis of rich qualitative data from two challenging professional contexts, this study provides insights into how and why communicators provide interactional justice to bad news recipients.

## **Communicator characteristics, interpersonal justice, and decision acceptance**

*Hayley German (London School of Economics) [hayleygerman@gmail.com](mailto:hayleygerman@gmail.com), David Patient (Católica-Lisbon School of Business and Economics), Irina Cojuharenco (Católica-Lisbon School of Business and Economics)*

### Purpose

Even when procedures, explanations, respect and politeness are held constant, it can matter

who communicates news regarding negative outcomes to affected employees.

#### Design/Methodology

We explore the effect of communicator hierarchical position on interpersonal justice (IPJ) perceptions and decision acceptance. Using a scenario experiment, individuals were assigned (N=105) to one of three conditions (CEO, Vice-President, and External Consultant as communicator), and respond to a situation in which a pay cut is administered, closely modeled on Greenberg's (1990) classic field-study.

#### Results

Greater hierarchical level of the communicator relates positively to employee decision acceptance and this relationship is mediated by perceptions of interpersonal justice. Both decision acceptance and IPJ are greater when the communicator is the CEO and less when the communicator is an external consultant. Interpersonal justice mediates the effect of who on decision acceptance. The relationship between who communicates bad news and IPJ is mediated by 1) perceived communicator prototypicality, and 2) perceived communicator appropriateness.

#### Limitations

Participants responded to a hypothetical scenario which may not have elicited the same reactions as the actual situation.

#### Research/Practical Implications

Within organizations different individuals, varying in hierarchical level and connection to the organization, can deliver bad news. Since who delivers the news can affect acceptance, fairness perceptions, and evaluation of the communicator in important ways, organizations should take care in selecting communicators regarded as appropriate, similar to employees, and of appropriate status.

#### Originality/Value

We explore the source of (in)justice and establish hierarchical position of the communicator to be an important predictor of justice perceptions.

## Personality at Work: Conceptual and Empirical Innovations

Session Chairs: *Joeri Hofmans (Vrije Univ. Brussel)* [joeri.hofmans@vub.ac.be](mailto:joeri.hofmans@vub.ac.be), *Filip De Fruyt (Ghent Univ.)* [Filip.DeFruyt@UGent.be](mailto:Filip.DeFruyt@UGent.be)

#### State of the Art

In the past two decades, researchers in Work and Organizational psychology have become increasingly interested in the role of personality. Most often, these studies have conceptualized personality as a set of stable person characteristics (or traits) that influences the way we feel, think, and behave at work.

#### New Perspective/Contribution

The exclusive focus on personality as (1) a set of stable person characteristics, and (2) a pure antecedent of work-related outcomes is overly narrow and it seriously limits our understanding of the role of personality at work. This symposium is devoted to recent innovations at this point. It shows that (1) intra-individual fluctuations in personality are theoretically meaningful, can be predicted from daily experiences at work, and relate to work outcomes such as engagement, adjustment, leadership, and performance. Moreover, it demonstrates that (2) changes in personality traits can be linked to occupational experiences, which implies that personality is not only an antecedent but also a consequence of work-related outcomes.

#### Conclusion and Implications for Research/Practice

In line with recent suggestions in the domain of personality psychology, we argue that, instead of conceptualizing personality as stable individual differences in the way people be-

have across a wide range of situations, personality can best be viewed as individual differences in the way people react to situations. This implies that both in research and practice, a full understanding of one's personality requires information on both inter- and intra-individual differences.

### ***Presentations of the Symposium***

#### **The effect of traitedness on the neuroticism-performance relationship. An event reconstruction study**

Jonas Debusscher (Vrije Univ. Brussel) [jdebussc@vub.ac.be](mailto:jdebussc@vub.ac.be), Joeri Hofmans (Vrije Univ. Brussel)

##### **Purpose**

Studies on the personality-performance relationship consistently showed weak relationships. We argue that this is partly due to the fact that these studies did not take into account individual differences in the extent to which people behave congruent with their trait level. We hypothesize that trait neuroticism better predicts performance for individuals high on traitedness (i.e., people always behaving equally neurotic) than for people low on traitedness (i.e., people varying a lot in their level of neuroticism).

##### **Design/Methodology**

46 employees reported on their neuroticism level in four work-related situations. One week later they rated their task performance in each of these situations. In addition, NEO-FFI trait neuroticism scores were collected.

##### **Results**

We obtained a measure of traitedness by computing, per individual, the standard deviation of his/her neuroticism scores across the four work-related situations (a low SD implies high traitedness and vice versa). Moderated regression analyses with trait neuroticism, SD, and the trait neuroticism x

SD interaction showed that trait neuroticism was related to performance, yet only for people high on traitedness.

##### **Limitations**

Future research is needed to replicate these findings for other personality dimensions and other types of performance.

##### **Research/Practical Implications**

Performance can only be predicted from trait neuroticism for people who consistently behave according to their trait level. This stresses the necessity to obtain information on both the trait level and level of traitedness.

##### **Originality/Value**

This study is the first to show the impact of traitedness, thereby providing an account why previous studies often found weak personality-performance relationships.

#### **Freshmen's trait and state core self-evaluations - Relations with work engagement and adjustment to university in a measurement-burst design**

Annika Nübold (Bielefeld Univ.) [annika.nuebold@uni-bielefeld.de](mailto:annika.nuebold@uni-bielefeld.de), Günter W. Maier (Bielefeld Univ.)

##### **Purpose**

In this study we explore the nature of individuals' (N = 79 freshmen) state CSE, its interrelations with trait CSE, and relations with daily experiences, work engagement and adjustment to university.

##### **Design/Methodology**

A measurement-burst design (3x10) with three waves and daily measurements at 10 consecutive days of lecture was applied. Multi-level modeling (Mplus) was used to account for nested data.

##### **Results**

Individuals' daily CSE differed due to daily experiences and their trait CSE. Further, indi-

viduals with low trait CSE reacted more strongly to positive and negative experiences in terms of their state CSE. However, this effect was only present at the beginning of the term. Over time, there was a rise in freshmen's state CSE although they were experiencing fewer positive situations. Further, the influence of daily positive and negative experiences on daily adjustment was mediated by daily CSE as a first and daily work engagement as a second mediator in a three-path mediated model.

#### Limitations

The sample size was quite small and consisted of students only.

#### Research/Practical Implications

Future studies should investigate these relationships in an organizational context. Developmental interventions and leadership behavior might be of importance (specifically for low trait CSE individuals in new situations) when it comes to boosting employees' state CSE.

#### Originality/Value

This is the first study to look at CSE on a daily basis and explore its relations with trait CSE, daily antecedents, and outcomes.

### **The underlying mechanisms of leadership: An integrative model**

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#### State of the Art

Even though the Full Range of Leadership paradigm acknowledges the dynamic nature of leadership style, it does not offer an explanation for why leaders engage in different behaviors across situations while being more inclined to engage in particular behaviors than in others. In leadership literature several theories have aimed to explain the stability of leadership style (trait approaches to leader-

ship) or the variability in leadership behavior (e.g. LMX theory). However, there is no framework that integrates the two perspectives.

#### New Perspective/Contribution

We aspire to fill the above-mentioned gap by offering a model that accounts for the simultaneously solid and fluctuating nature of leadership. Our model undertakes to explain leaders' behavioral inclinations by their Core Evaluations (their fundamental beliefs about themselves, others and the world); and explain leaders' momentary leadership behaviors by their state Core Evaluations (their temporary appraisals about themselves, others and the world; the fleeting cognitions that emerge from the interaction between situational features and trait Core Evaluations). We will illustrate our model with the behaviors described in the transformational and transactional leadership framework.

#### Research/Practical Implications

Leadership trainings are often inefficient because they aim to generate change by teaching new behavioral skills, but do not address the beliefs and appraisals that underlie behaviors. Understanding the drivers of leadership behavior offers a theoretical approach that, if applied to practice, will enable effective and sustainable intervention.

#### Originality/Value

Our model integrates the trait and state perspective on leadership into one, coherent framework.

## Vocations as a source of identity: Evidence for occupational socialization over 15 years

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### Purpose

There is now compelling evidence that people choose occupations that fit their personality traits. But do our occupational experiences also shape who we are? Occupational socialization, defined as changes in the person in and because of the work environment, remains a severely understudied topic. Drawing on research demonstrating that experiences from other life domains (e.g., marital life) influence personality trait development, the purpose of the present study is to examine whether and how vocational experiences influence trait change.

### Design/Methodology

To address this research question, a cohort of 260 college alumni was tracked across a significant and substantial time interval. Personality (i.e. Big Five traits) and occupational characteristics (i.e. RIASEC dimensions) were assessed at career start and 15 years later when their careers had unfolded.

### Results

Structural equation models provided evidence for selection effects (i.e. people selecting occupations that fit their personality) and socialization effects (i.e. people's personality traits changing under the influence of those occupations that were initially selected). Individuals in stronger enterprising (E) occupations, for instance, have smaller increases in Agreeableness over time compared to those in less competitive occupational environments.

### Limitations

The availability of only two assessment points did not allow us to test non-linear change patterns in personality traits and occupational characteristics.

### Research/Practical Implications

Our study shows that the association between traits and occupations is bidirectional rather than unidirectional. Traits change in and because of work environments.

### Originality/Value

This study is the first to provide solid evidence for occupational socialization processes using a strong methodology.

## What's Considered Fair in Teams? Justice, Norms, and Teams

Session Chairs: Marion Fortin (Univ. of Toulouse, FR) [marionfortin@googlemail.com](mailto:marionfortin@googlemail.com), Natàlia Cugueró-Escofet (IESE Business School, ES) [ncugueró@iese.edu](mailto:ncugueró@iese.edu)

### State of the Art

An important determinant of team effectiveness is whether team members feel that they are treated fairly - by organisation, supervisor, and team members. To date, however, little research has focused on justice norms in teams. Justice norms are the standards according to which people judge whether a behavior or a decision is fair or not, concerning material allocations (e.g. pay and workload), procedures and interactions. Justice norms in team contexts are important, norms from other contexts may not be suitable in teams characterized differently (Colquitt and Jackson, 2006).

### New Perspective/Contribution

A set of four papers provides different research methodologies, different contexts, and different perspectives on issues relating justice, teams, and norms. A number of important questions will be addressed: For example, do team members see the treatment of others' in the team as a "normative standard" to which they compare their own treatment? (Bashshur, Rupp, and Oc). Does the equity rule still matter in team contexts,

where equal treatment may be more prominent? (El Akremi, Mignonac and Molines ). What are the justice norms used for different types of work resources in team contexts (German and Patient)? And what is the impact of different justice norm expectations in teams on team conflict? (Adamovic, Fortin & Diehl).

#### Conclusion and Implications for Research/Practice

Each presentation includes research and practical recommendations. Opportunities for advancing research in the area of justice, teams, and norms are presented in both the discussant's (Jacqueline Coyle-Shapiro, LSE) comments on the papers and in the time set aside after for audience discussion.

### ***Presentations of the Symposium***

#### **Exploring the norms of task-relevant injustice**

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##### Purpose

Not receiving the resources to properly complete tasks, can be an important and underexplored type of fairness – task-relevant distributive justice. Since task-related resources often come from team members as well as from supervisors, we examine norms for allocation preferences and the source of task-relevant allocations.

##### Design/Methodology

First, we ask a sample of employees how allocations of personal benefit versus allocations of task-resources should be distributed, according to three allocation rules (equity, equality and need). Second, justice norms for the allocation of task-relevant resources may vary depending on the source of the resource. We examine preferences for distribu-

tion rules depending upon the source of the resource (team- versus supervisor- allocation), and how these preferences affect perceptions of task-relevant justice and overall justice.

##### Results

As task-relevant distributions differ from distributive justice in several important respects, we should not assume that the equity justice norm will be seen by employees as appropriate for resource allocations. For task-related resources, an equality norm may be preferred, especially in teams and other contexts where interdependence is high and cooperation is sought.

##### Limitations

Participants responded to a hypothetical situation, which, even if designed to be realistic, will not have the same effects on respondents as a real situation that is embedded in a work relationship.

##### Research/Practical Implications

Receiving the resources to do their jobs can be an important source of fairness and motivation for employees.

##### Originality/Value

We explore employee justice perceptions relating to the source of resources and the allocation norms used in their distribution.

#### **Relative justice: The effect of differences in individual and group treatment**

*Michael Bashshur (Singapore Management Univ., SG)* [mbashshur@smu.edu.sg](mailto:mbashshur@smu.edu.sg), *Deborah Rup (Purdue Univ., US)*, *Burak Oc (Univ. Pompeu Fabra, ES)*, *Samantha Sim (Singapore Management Univ., SG)*

##### Purpose

How an employee's group is treated on average (i.e., the norm for justice in the group) has an incremental effect on how individual employees react, beyond the effects of their individual treatment. We go a step further and argue that the differences among individual



perceptions of justice and the level of justice perceptions within the group also matter. Based on the group-value model of justice (Lind & Tyler, 1988) and Fairness Theory (Folger & Cropanzano, 1998) we argue that employees compare their treatment to how their group is treated (or “the group norm”) and that this relative justice judgment predicts incremental variance in employee reactions beyond the main effects of the norm and individual justice treatment.

#### Design/Methodology

We tested our predictions with a survey based field study of 80 platoons from the Republic of Korea and a laboratory study of student groups.

#### Results

The results of our field study show that inequitable comparisons (both advantageous and disadvantageous) have a negative effect on in role performance and satisfaction with supervision.

#### Limitations

Our laboratory study is ongoing, but early signs are promising.

#### Research/Practical Implications

We expect to show the moderating role of interdependence on relative justice effects. The effect of relative justice should weaken (especially for advantageous comparisons) in interdependence goes down. Employees use justice norms as a comparator against which they judge their own treatment; sometimes with unexpectedly negative reactions.

#### Originality/Value

This research suggests that in addition to the main effects of justice norms and individual treatment, relative differences matter.

### The impact of justice norms on conflict in the context of teams

Marion Fortin (Univ. of Toulouse, FR) [marionfortin@googlemail.com](mailto:marionfortin@googlemail.com), Mladen Adamovic (Univ. of Toulouse, FR), Marjo-Riitta (Maikki) Diehl (EBS Business School, EBS Univ. für Wirtschaft und Recht)

#### State of the Art

Despite the large bodies of literature on different types of conflict (task, process, relationship) on the one hand and justice dimensions (distributive, process, interactional) on the other hand, researchers have only recently started to investigate the link between different justice and conflict types. For instance, Spell and colleagues (2011) found that distributive injustice from the manager is linked to task conflict inside teams. Similarly, research on expatriate couples (Van Erp et al., 2011) suggests that distributive justice perceptions increase the perceived task conflict of both partners. Recent studies also suggest links between interactional justice and conflict: Van Erp et al. found that interpersonal justice influences relationship conflict, and Ayub and Jehn (2011) found that respect – a central treatment norm – increases task conflict, while reducing relationship and process conflict. It appears that respect makes team members focus on the task and help each other more.

#### New Perspective/Contribution

Our theoretical paper systematically develops propositions on the influence of justice perceptions among team members on the three types of conflict. We propose that depending on the type of justice norms violated, different types of conflict are likely to occur.

#### Research/Practical Implications

Based on group engagement theory, we propose relationships between procedural injustice, interactional injustice and relationship and process conflict. We further suggest

that the effects of injustice on task conflict are mixed, with distributive injustice increasing, and interpersonal injustice decreasing task conflict.

#### Originality/Value

Our research provides a basis for a systematic and comprehensive empirical study on justice and conflict between team members.

### **Distributive justice and affective commitment among French police: Does the equity norm matter at work-unit level?**

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#### Purpose

Equity as a norm for distributive justice has tended to be conceptualized at the individual-level, with scant attention devoted to group-level analyses (Li & Cropanzano, 2009). This individualistic approach can be seen as simplistic, insofar as justice norms relate to social and collective sense-making and to shared principles regarding how outcomes “ought” to be distributed (Sabbagh, 2001). However, research has started conceptualizing justice as a ‘collective construct’. In this research we test a multilevel model of distributive justice and employee commitment.

#### Design/Methodology

Specifically, we investigate whether distributive justice climate explains additional variance in affective commitment above and beyond that explained by individual perceptions. We test our hypotheses using data from 5,096 police men and women nested in 516 units in France. Hierarchical Linear Modeling was used to test the cross-level effect of distributive justice climate on individual affective commitment.

#### Results

Results showed that at the work-unit level justice climate was positively related to individual affective commitment ( $\gamma_{01} = .23, p < .01$ ), accounting for all individual-level variables.

#### Research/Practical Implications

This study contributes to the literature on justice climate and norms in teams in two ways. First, it extends the literature on justice climate, by examining at multiple levels of analysis distributive justice and its links with affective commitment. Second, we explore the multilevel influence of justice on commitment among a large and original sample: 5,096 French police.

#### Originality/Value

In focusing on a unique group of public servants, this study sheds new light on justice climate research in a different, but important, cultural and organizational context.

### **New Developments in the Research of Political Skill (PS): Individual, Team and Cultural Considerations**

*Session Chairs: Elena Lvina (St. Joseph's Univ., US) [elvina@sju.edu](mailto:elvina@sju.edu), Gerhard Blickle (Univ. of Bonn, DE) [gerhard.blickle@uni-bonn.de](mailto:gerhard.blickle@uni-bonn.de)*

#### State of the Art

This symposium develops new ideas and thinking about Political Skill (PS; Ferris et al., 2005) and sheds light on the questions raised by managers and practitioners: What benefits do organizations derive by politically skilled employees? Why PS is critical for effective leadership? How does PS relate to other constructs such as emotional intelligence, in predicting individual and organizational outcomes? When does PS affect company internalization? How does PS relate to political will?

### New Perspectives/Contributions

The symposium represents a coordinated effort of researchers from 6 cultures and 12 different institutions. Five papers include accounts of the role played by PS at individual, team, organizational and national levels. The first paper demonstrates the effect of political skill on transmitting leaders' identities into leadership effectiveness. Addressing the relationship between PS and Emotional intelligence, the second paper supports a model where political skill facilitates the influence of Emotional Intelligence onto job attitudes, such as job satisfaction and turnover intention. Next paper speaks to the question of when PS gets enacted, bringing political will into the picture. Finally, two papers take the individual PS to the higher level of analysis and explore its role for team effectiveness and for companies' internationalization. The findings contribute to the literature by answering the question of whether PS is beneficial for everyone and whether the benefits of individual political skill extend to more collective outcomes.

### Research/Practical Implications

Organizational implications discussed by the authors extend to individual and team performance, recruitment, selection, training, staffing, and team building, at both national and international settings.

## ***Presentations of the Symposium***

### **Leader political skill and socioanalytical theory – A multi-source study**

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#### Purpose

To examine the role of leader political skill as a social skill variable within the context of socioanalytic theory (Hogan & Shelton). More

specifically, to test the moderating role of leader political skill for the effect of leaders' identities to get along and ahead on leadership effectiveness.

#### Design/Methodology

Survey data were collected from 519 German school headmasters and 1867 teachers. Headmasters rated the degree to which they wanted to get along and ahead and their political skill. Teachers rated their headmaster's Consideration and Initiating Structure behavior, the institutional effectiveness of the school and their own job satisfaction. Multiple hierarchical regression analyses were employed.

#### Results

Leader political skill interacted with the leader identities to get along and ahead to predict teacher job satisfaction scores and institutional effectiveness above and beyond Consideration and Initiating Structure behavior, respectively.

#### Limitation

The cross-sectional design does not allow causal inferences and the generalizability of the findings is restricted due to the study setting.

#### Research/Practical Implications

The results speak to the relevance of leader political skill for predicting workplace outcomes on the basis of socioanalytic theory. The study adds to our understanding how a leader's identity is transferred into leadership effectiveness.

#### Originality/Value

First, the study represents the first test of socioanalytic hypotheses within the leadership context. Second, the increment value of the leader political skill-leader identity interaction above and beyond behavioral measures of leadership styles is evaluated. Third, this study helps to explain inconsistencies in the findings

on the validity of Consideration and Initiation Structure.

### **Emotional intelligence and work outcomes: The role of political skill**

*Galit Meisler (Peres Academic Center, IL) [galit.meisler@pac.ac.il](mailto:galit.meisler@pac.ac.il), Eran Vigoda-Gadot (Univ. of Haifa, IL)*

#### **Purpose**

To examine the relationship between political skill (PS) and job outcomes (i.e. job satisfaction, turnover intentions and negligent behavior) and the mediating role of PS in the relationship between emotional intelligence and these job outcomes.

#### **Design/methodology**

The first study is based on two samples: 308 employees of a municipally, and 61 employees of an engineering company. The second study is based on a sample of 368 employees from a financial organization. All three organizations were located in Israel.

#### **Results**

PS was found to positively relate to job satisfaction, and negatively relate to turnover intentions and negligent behavior. Moreover, PS was found to partially mediate the relationship between emotional intelligence and job satisfaction, and fully mediate the relationship between emotional intelligence and both turnover intentions and negligent behavior.

#### **Limitations**

The main limitation of this research is that most of its data came from one source. In order to enhance our confidence in the self-report measure of turnover intentions we acquired archival information regarding actual turnover.

#### **Research/Practical implications**

Emotional intelligence training may be employed by organizations to enhance PS, and consequently influence work outcomes.

#### **Originality/value**

The direct and indirect impact of PS on job attitudes is largely overlooked in the literature. Our study examines these relationships and provides empirical evidence to support them. Moreover, our study explored political skills among Israeli employees, which adds to the generalization power of previous studies, mostly completed in the United States and Western Europe.

### **Political will: Multi-dimensional scale development and multi-sample validation**

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#### **Purpose**

To develop and validate a multi-dimensional measure for political will.

#### **Design/Methodology**

In the first study, we generated 50 items to capture political will (PW) using a deductive item-generation approach and assessed the substantive validity of the scale on a sample of 34 field experts. The second study involved four cross-national samples (N1=126; N2=87; N3=104; N4=117). These were used to assess reliability, factor structure, convergent and criterion-related validity, the impact of method effects, and culture invariance. Finally, we conducted hierarchical regressions to determine whether PW and political skill are complementary.

#### **Results**

We found support for a two-dimensional factor structure, capturing both the instrumental and altruistic nature of PW. As hypothesized, political will relates to need for achievement,

need for power, risk propensity, Machiavellianism, political skill, and political behavior. Furthermore, no method and culture effects were present. Finally, the scale was positively related to Kipnis' six influence tactics. Additionally, it predicted an individual's likelihood to engage in influence behaviors, after partialling out the effects of political skill.

#### Limitations

Reliance on single source, self-report data that may introduce common method variance. Also, the cross-sectional nature does not allow for causal inferences.

#### Research/Practical Implications

The study advances the notion of PW as an individual characteristic necessary for engaging in influence behavior, for activating political skill, and for personal success.

#### Originality/Value

PW has been discussed as critical for more than 30 years (Mintzberg, Pfeffer, Ferris). This multi-study, cross-national research presents the first attempt to develop a reliable and valid scale of political will.

### Political skill and team performance

*Elena Lvina (Saint Joseph's Univ., US) [elvina@sju.edu](mailto:elvina@sju.edu), Gary Johns (Concordia Univ., CA), Christian Vandenberghe (HEC Montreal, CA)*

#### Purpose

This study provides theoretical background and empirical justification for the political skill-outcomes relationship at a higher level of analysis.

#### Design/Methodology

Survey data were collected from 189 student project teams and 28 retail store work teams. The mediation model was tested with structural equation modeling and bootstrapping technique.

#### Results

We determined the role of team political skill composition as a predictor of team cohesion and team effectiveness. Team political skill, operationalized as the interaction between the group skill mean and standard deviation ("skill strength"), was the best predictor of emergent states and outcomes. In both samples, team political skill related to subjective team performance via group task cohesion. In addition, team political skill was related to the objective measure of team performance via social and task cohesion in the student teams and via task cohesion in the work teams.

**Limitations:** While both procedural controls and post-hoc methods we used in the student sample to ensure the lack of common method variance, the methodological controls (Podsakoff et al., 2012) could not be used in the work teams.

#### Research/Practical Implications

The theoretical and practical contributions extend to the current political skill and team literatures. The study adds team political skill to the well-established pool of antecedents of team effectiveness, such as general mental ability and personality. Organizational implications extend to recruitment, selection, training, staffing, and team building.

#### Originality/Value

This study represents the first attempt to answer the question of whether the benefits of political skill extend beyond individual outcomes.

### Political skill for global managers: Does political skill affect internationalization?

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### Purpose

The study aims to investigate possible effects of political skill on internationalization. In this scope, the relationship between political skill and global mindset is examined. Moreover, the effect of political skill and global mindset on internationalization degree is tested.

### Design/Methodology

Totally 299 managers and their subordinates from different sectors and levels were included in the conducted research. The participants who are working at both local and international companies in Turkey were reached by mail and online survey link sent by e-mail.

### Results

There is a relationship found between political skill and global mindset for managers according to both their self-ratings and subordinate perceptions ( $r = .32, p < .01$ ). Another significant relationship is seen between global mindset of managers and internationalization degree of the companies they work ( $r = .31, p < .05$ ). This relationship is also significant for subordinate ratings about global mindset of their managers.

### Limitations

The cross-sectional nature of the research may cause common method variance bias.

### Research/Practical Implications

Political skill might be accepted as a required qualification for top managers and expatriate candidates in international companies.

### Originality/Value

Since possible direct effects of political skill on organization have not been debated as much as other topics, this research point out how political skill might have influence on organizational level apart from individual level. The findings indicated that political skill is very crucial for organizational decisions, growth and internationalization because of its significant correlation with global mindset. Besides,

the correlations are approved by self and subordinate ratings.

## Exploring the Dynamics of Perceived Organizational Support

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### State of the Art

Perceived organizational support (POS) provides a simple yet useful way of understanding social exchange at work and has received much empirical support (Rhoades & Eisenberger, 2002). The field has mainly concerned itself with examining the antecedents to and consequences of POS. A better understanding of how POS works is however limited by two linked theory and method shortcomings: first, a failure to reflect on the appropriateness of referring to antecedents and consequences, given that POS is seen as part of an ongoing social exchange; second, research is dominated by cross-sectional designs and therefore cannot examine causality and, perhaps more importantly, cannot control for unobserved heterogeneity due to their single time measurements. In summary, we don't currently know the causal ordering of POS and related constructs.

### New Perspectives/Contributions

We contribute by examining POS as a dynamic construct. We present four longitudinal studies examining the links between contextual factors, such as justice, uncertainty and attribution, that help shape POS and the links between POS and important affective, attitudinal and behavioural outcomes. The direction of causality and reciprocal causality is considered. The longitudinal studies vary in terms of time horizon, ranging from daily and weekly



diary studies to surveys separated by 12 month intervals.

#### Research/Practical Implications

The studies provide more realistic estimates of the antecedents to and effects of POS. They examine POS's dynamic variation, crucial to organizations considering leveraging organizational support.

### ***Presentations of the Symposium***

#### **Does uncertainty management theory explain levels of POS during change?**

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#### Purpose

The study examines whether the relationship between fairness (interactional and informational justice) and subsequent perceived organizational support (POS) is stronger under conditions of high uncertainty (relating to job role), as would be suggested by Uncertainty Management Theory (UMT; Lind & van den Bos, 2001). UMT has received growing attention and support by researchers (e.g. Thau et al, 2007; De Cremer et al, 2010; Takeuchi et al, 2012). Despite often being linked to justice, POS has not before been studied within a UMT framework.

#### Design/Methodology

A two-wave questionnaire survey, with a 12 month lag, of 117 UK public sector workers experiencing organizational restructuring.

#### Results

The results support the direct relationships between justice, uncertainty and POS across the two time-points. Uncertainty (T1) was further found to moderate the relationships between both of the justice measures (T1) and POS (T2). However, the effects found suggest that uncertainty reduces, rather than enhances, the impact of justice perceptions on POS.

#### Limitations

The sample is relatively small and ideally a third wave of data would provide a better test of causation.

#### Research/Practical Implications

The study challenges the utility of UMT in explaining POS during organizational change. Instead it suggests an alternative account of uncertainty's role in relation to justice and outcomes.

#### Originality/Value

This is one of a small number of field studies to directly assess the propositions of UMT and does so with POS, an important outcome variable not studied previously in relation to UMT.

#### **3-wave panel analysis of POS antecedents across 24 months following a multinational acquisition**

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#### Purpose

Rhoades and Eisenberger's (2002) meta-analysis identified a range of antecedents of POS; examples included fairness/justice perceptions, organizational rewards and job conditions (including job security). Despite showing significant average correlations between antecedents and POS, Rhoades and Eisenberger caveat that: "The widespread use of bivariate cross-sectional procedures...leaves uncertain the causal order of the observed associations" ... "Additional Panel studies would be helpful to obtain better evidence concerning causality" (p.710). The current study answers this call by tracking employees' perceptions of POS and antecedents across the restructuring period following a multinational acquisition.

#### Design/Methodology

We tracked 187 employees from the acquired and acquiring firms (UK, The Netherlands and

Sweden) across 3-waves (beginning 2 months post-completion) separated by 12 month intervals. We measured distributive and procedural justice, managerial communications, job insecurity and POS.

#### Results

3-wave cross-lagged analysis indicated that T2-T3 changes in POS were associated with earlier T1-T2 changes in distributive justice (in a positive direction) as well as T1-T2 changes in insecurity (in a negative direction).

#### Limitations

The sample was small (due to attrition and a 20% reduction in the population), a larger sample would have enabled us to conduct latent variable SEM.

#### Research/Practical Implications

Our results generally support propositions and empirical findings proposed by previous authors highlighting the central role distributive justice perceptions have in predicting subsequent changes in POS (in an acquisition context).

#### Originality/Value

Very few panel studies exist that examine antecedents of POS; this study fills this gap. Furthermore in the context of organizational change/turmoil this study offers insights in a rich applied setting.

### **Perceived organizational support in everyday work life**

*Neil Conway (Birkbeck Univ. of London) [neil.conway@rhul.ac.uk](mailto:neil.conway@rhul.ac.uk), Tina Kiefer (Warwick Business School, Univ. of Warwick), Rob Briner (Univ. of Bath)*

#### Purpose

Support in everyday life often arises in response to events. One particular way of researching support in organizations has been through perceived organizational support (POS), as a way of understanding social ex-

change at work. We know little, however, about how POS operates on an everyday basis and an event-based level analysis has been over-looked conceptually and methodologically. The aim of this paper is to examine POS as it fluctuates on a daily basis in response to events and sensemaking around events.

#### Design/Methodology

350 employees undergoing major change completed diaries for 10 working days. We measured POS (3 items) OCBs, and captured positive and negative events daily. Event-related information included attributions, who initiated the event, and emotional reactions to the event. Our analysis was qualitative (content analysis of reported events) and quantitative.

#### Results

About half the variation in POS is attributed to daily fluctuation. Negative events affect POS more than positive events. Line managers are most likely to act as the organization's agent. POS and OCB are reciprocally related; attributions play a key role in moderating reciprocity.

#### Limitations

All our data was self-reported. We contribute to POS research by showing how POS varies over time, how sensemaking affects reciprocity to POS, and using a more sophisticated research design. Our paper is valuable to practitioners as it offers everyday practical examples of how manager behavior affects POS.

#### Originality/Value

We present the first conceptual and empirical diary analysis of POS at an everyday level and in doing so provide initial data addressing fundamental questions.

### **POS and psychological contract breach and violation: A weekly diary study**

*Mattdijs Bal (VU Univ. Amsterdam) [p.m.bal@vu.nl](mailto:p.m.bal@vu.nl), Joeri Hofmans (VU Brussel), Tugba Polat (VU Univ. Amsterdam)*

#### **Purpose**

The current study investigated how POS influences the extent to which people experience psychological contract breaches, as well as the impact contract breaches have on perceptions of violation, or the emotional reaction to breach. Based on the job demands-resources model, we expected that employees who experience high autonomy, POS, and development opportunities are less likely to experience contract breach and to be less affected emotionally. Finally, we investigated whether job experiences have a moderating impact on type of breach, such that relations would be stronger for transactional breach than for relational breach.

#### **Design/Methodology**

80 employees working in health care filled out surveys for six consecutive weeks. Multilevel zero inflated Poisson regression analyses were conducted to test the hypotheses.

#### **Results**

Results showed that in particular POS decreases the likelihood of contract breach as well as violation. Finally, social support strongly buffered the impact of transactional breach, such that violation was less strong when employees received high social support.

#### **Limitations**

The study was self-reported only.

#### **Research/Practical Implications**

The study shows that positive experiences at work can diminish and buffer the effects of contract breaches.

#### **Originality/Value**

This is the first study that shows the relations between POS and reported weekly contract breaches at work.

### **Advances in Change-Oriented Behavior at Work: Theory and Research from Citizenship, Proactive and Innovative Behavior Approaches**

*Session Chairs: Hector Madrid (Univ. of Sheffield) [h.p.madrid@sheffield.ac.uk](mailto:h.p.madrid@sheffield.ac.uk), Cumali Uri (Univ. of Sheffield) [uri@sheffield.ac.uk](mailto:uri@sheffield.ac.uk)*

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#### **State of the Art**

Change-oriented behavior is considered indispensable for most of contemporary organizations. However, despite efforts of scholars to clearly differentiate between discrete behavioral constructs (e.g. OCB, proactivity and innovation), similar antecedents have been proposed for different forms of change-oriented behaviors. Furthermore, individual and contextual antecedents have been identified as critical for change-oriented behavior; yet, the interaction between context and individual factors has been investigated less. Each of the studies proposed in this symposium addresses at least one of these limitations.

#### **New Perspective/Contribution**

The issues of the multidimensionality of change-oriented behavior were investigated in the first three studies. Uri and colleagues found that voicing suggestions for changes was associated with authentic leadership, while implementing changes was linked to transformational leadership. Moreover, Fischer and Seeger showed that different cognitive styles are needed when generating and implementing novel ideas. Next, Madrid and

colleagues provide evidence for the differential associations between leader affective presence with employee proficiency and proactivity.

The last two studies deal with the interaction between context and individual factors. Belschak and Den Hartog observed that Machiavellian employees show more challenging OCB than Non-Machiavellians when leaders are transformational, but less change-oriented behaviours when leaders are highly ethical. Finally, Battistelli and colleagues found support for a complex mechanism whereby job autonomy moderates the mediational process between role orientation, goal commitment and innovative behavior.

#### Conclusion and Implications for Research/Practice

Studies presented are based on strong theory, methods and data analysis (e.g. longitudinal, multisource/multilevel). Taken together, they integrate previous knowledge and identify novel psychological processes, offering new paths to manage change-oriented behavior.

### ***Presentations of the Symposium***

#### **The effect of different leadership styles on voice and taking charge behavior**

Cumali Uri (Univ. of Sheffield) [uri@sheffield.ac.uk](mailto:uri@sheffield.ac.uk), Karoline Strauss (Univ. of Sheffield), Carolyn Axtell (Univ. of Sheffield), Hector Madrid (Univ. of Sheffield)

##### Purpose

Leadership has been identified as a key antecedent of proactivity; however, research has focused primarily on transformational leadership, paying less attention to other forms of leadership. Thus, whether different leader strategies have different implications for specific proactive behaviours is still unclear. This paper aims to explore authentic leadership and transformational leadership as differential

predictors of voice and taking charge, respectively.

Voicing work-related improvements is highly dependent on trust and the quality of social work environments. In contrast, taking charge involves active implementation of changes, and is linked to goal achievement and support for change. We propose that authentic leadership is more strongly related to voice than to taking charge (H1), since authentic leadership entails open, transparent and positive relations/communication between leader and followers. In contrast, transformational leadership is more strongly related to taking charge because it involves a clear vision, inspiration and support for enacting changes.

##### Design/Methodology

A multisource study based on 127 employees and 24 leaders were conducted in Turkey. Employees provided ratings of leadership, whilst leaders rated behaviors of employees. Multilevel analysis was used to control for the nested data structure.

##### Results

As expected, authentic leadership was related to voice, but not to taking charge; transformational leadership was related to taking charge, but not to voice.

##### Limitations

The design of this study was cross-sectional. Further longitudinal research is needed to understand how leadership and proactivity unfold over time.

##### Originality/Value

Extending previous research, this study suggests that specific proactive behaviors require different leadership influences. Practical implications will be discussed.

### **Who likes to do the different tasks as innovation projects move forward? An investigation of cognitive styles**

Sebastian Fischer (Leuphana Univ. of Lüneburg) [sfischer@leuphana.de](mailto:sfischer@leuphana.de), Björn Seeger (Leuphana Univ. of Lüneburg)

#### **Purpose**

Cognitive styles are frequently used to predict employee innovative behavior at workplaces. Recent research indicates that teams which are composed of individuals with different cognitive styles achieve most innovative project outcomes. This may relate to different activities which need to be performed in innovation projects. Innovation projects are suggested to consist of several stages, from creative idea generation to innovation implementation. These stages may selectively suit single cognitive style facets.

We hypothesize that a creative cognitive style increases individual participation in early, creative stages of innovation projects, whereas attentive-to-detail cognitive style increases participation in later stages of innovation projects which emphasize thoroughness in the execution of a plan.

#### **Design/Methodology**

For this study we asked  $n = 339$  small business employees on their involvement in four stages of between one and three pre-defined business innovation projects ( $M = 2.12$ ).

#### **Results**

Results from multilevel growth modeling (level 1: innovation projects; level 2: person) indicate that both intercept and slope variation can be explained through cognitive styles: Those with a creative cognitive style participate more strongly in innovation projects in general, and specifically early in these projects. Those with an attentive-to-detail cognitive style increase participation in later stages of a project.

#### **Limitations**

Limitations are a bias due to the focus on successful innovation projects, and the use of a simple stage model

#### **Originality/Value**

We suggest that this study adds to our understanding of the complex nature of innovation projects. These projects require individuals with different cognitive styles to team up for effective innovation project work.

### **How leader affective presence relates to proactive behavior in team members**

Hector Madrid (Univ. of Sheffield) [h.p.madrid@sheffield.ac.uk](mailto:h.p.madrid@sheffield.ac.uk), Peter Totterdell (Univ. of Sheffield), Karen Niven (Univ. of Manchester)

#### **Purpose**

Affective presence refers to the feelings that an individual consistently elicits in other people (Eisenkraft & Elfenbein, 2010). This novel construct, which originated in personality research, has been shown to be relevant for network centrality in groups; yet, it is almost unknown in organizational research. We propose that a team leader's affective presence will relate to his or her team members' work behaviors, particularly when the latter involves risk, such as voicing and implementing novel ideas. If leaders elicit negative feelings in others, their followers will be less inclined to voice suggestions and spend effort on making changes.

#### **Design/Methodology**

A multi-source study based on 81 employees nested in 12 teams was conducted to test the above propositions in a multinational company. Team members provided ratings of how their leaders made them feel, whilst team leaders rated the work behavior of team members.

#### **Results**

Inter-rater agreement analysis (rwg) supported shared perceptions of leader affective

presence among members of the same team. Correlation analysis indicated that negative affective presence in leaders was negatively related to employee voice-behavior and taking charge, but not to proficiency.

#### Limitations

The sample size was small which limits the representativeness of the results, but data collection is still in progress (300 individuals nested in 60 teams is expected). Causal direction is inferred.

#### Research/Practical Implications,

Affective presence has implications for interpersonal processes at work (e.g., leadership, teamwork, customer service). Leaders should be aware that eliciting negative feelings in others might stifle proactive behavior among their team members.

### **From selfishness to pro-organizational efforts: Machiavellianism and pro-organizational change**

*Frank Belschak (Amsterdam Business School) [F.D.Belschak@uva.nl](mailto:F.D.Belschak@uva.nl), Deanne Den Hartog (Amsterdam Business School)*

#### Purpose

Machiavellians are usually regarded as selfish, manipulative people who can seriously damage the reputation and performance of an organization. Yet, some authors note that Machiavellians are also highly adaptive and able to cooperate and contribute to the organization if needed. Here we investigate how leaders can stimulate their Machiavellian followers to engage in pro-organizational change efforts (challenging organizational citizenship behavior, e.g., voice or change initiatives). We explore the effects of different leadership styles (transformational, transactional, and ethical leadership) on the relationship between employee Machiavellianism and employee challenging OCB. We hypothesize that high Machiavellians react more positively to

transformational and transactional and more negatively to ethical leader behaviors as compared to low Machiavellians.

#### Design/Methodology

To test our hypotheses, we conducted three (survey) field studies (one multi-source and two single-source studies, N=115, 107, and 206) among employees working in different companies and industries.

#### Results

Linear regression analyses were computed to test the moderating effect of leadership styles on the Machiavellianism - challenging OCB relationship. Results show that Machiavellian employees show more challenging OCB than Non-Machiavellians when experiencing highly transformational leaders; they show less change-oriented behaviors when being confronted with a highly ethical leader. Transactional leadership did not interact with Machiavellianism with respect to challenging OCB.

#### Originality/Value

While some studies have investigated Machiavellian leaders, to our knowledge, no study has investigated how to lead Machiavellian employees.

### **The relationships of flexible role orientation, goal commitment and task autonomy to innovative work behavior: A moderated mediation study**

*Adalgisa Battistelli (Paul Valéry Univ.) [adalgisa.battistelli@univ-montp3.fr](mailto:adalgisa.battistelli@univ-montp3.fr), Francesco Montani (Paul Valéry Univ.), Carlo Odoardi (Univ. of Florence)*

#### Purpose

Although the effects of goal commitment on task performance are well documented in the literature, its relationship to change-oriented behaviors remains unclear and poorly investigated. Addressing this issue, this study investigates the link between goal commitment and innovative work behavior (IWB), and identifies



flexible role orientation (FRO) as a boundary condition that would strengthen its effects on individual innovativeness. We propose that people high in FRO are more likely to include creativity and innovation within the bounds of their role responsibilities, while their attention and effort can be primed on trying to be innovative on behalf of work goals. So, FRO would indirectly predict IWB via goal commitment (H1). Moreover, task autonomy can positively moderate the above mediation process (H2). High autonomous contexts enhance the level of control on one's job, which would increase the likelihood of individuals in achieving their work goals and being more involved in goal-directed innovative endeavors.

#### Design/Methodology

261 employees from four organizations were surveyed.

#### Results

Results from moderated mediation analyses provided support for all the hypotheses.

#### Limitations

The use of self-report measures could have inflated our estimates, and causality in the model was only inferred theoretically given the cross-sectional nature of the data.

#### Originality/Value

To the best of our knowledge, this is the first research to show the role of goal commitment in fostering change-oriented innovative behaviors, and to clarify how psychological states and work design characteristics interact with goal commitment to enhance workplace innovativeness.

## The Process to Performance

Session Chairs: *Evangelia Demerouti* (Eindhoven Univ. of Technology) [e.demerouti@tue.nl](mailto:e.demerouti@tue.nl), *Arnold Bakker* (Erasmus Univ. Rotterdam) [bakker@fsw.eur.nl](mailto:bakker@fsw.eur.nl)

#### State of the Art

Most research on job performance has used a between-person approach, focusing on global performance dimensions - often measured through self-reports. This research has revealed that the work environment influences job performance through work-related well-being. However, previous research has generally failed to explain a large amount of variance in performance.

#### New Perspective/Contribution

This symposium brings together five empirical contributions from three European countries using new theoretical perspectives on job performance and sophisticated research designs. Affective events theory, the performance episodes model, and conservation of resources theory provide a fruitful theoretical basis to explain performance at work. Experience sampling, quantitative diary approaches, and a longitudinal, quasi-experimental design are used to successfully uncover the process leading to performance, creative ideas generation, and adaptivity. The results clearly indicate that characteristics like recovery opportunities during work, positive work events, and job resources enhance performance, and that work engagement has favorable effects on performance. Additionally, the studies offer evidence for the existence of moderators of the work-related well-being – performance relationship, such as job involvement, positive work reflection, work pressure, and autonomy.

#### Conclusion and Implications for Research/Practice

The studies presented in this symposium uncover the possible process to performance. This process unfolds over short and longer-term time spans, is mediated through positive indicators of well-being, and can explain substantial variance in performance which is useful for both scientists and practitioners.

## ***Presentations of the Symposium***

### **Breaks and social activities as recovery within the working day: Associations with affect, fatigue and ideas generation**

Kevin Daniels (Univ. of East Anglia) [kevin.daniels@uea.ac.uk](mailto:kevin.daniels@uea.ac.uk), Jane Glover (Loughborough Univ.), Nadine Mellor (Health and Safety Laboratory)

#### **Purpose**

Recovery from the demands of work has been linked to a range of beneficial outcomes. We examined affective well-being, fatigue, and creative ideas generation as outcomes of workers enacting the resources of job control and social support to take breaks during the working day.

#### **Design/Methodology**

We used an experience sampling methodology. Seventy one workers provided data for up to four times a day for up to five working days. As well as assessments of enacting job control or social support to take breaks from work, affective well-being, fatigue, and creative ideas generation, we assessed a range of control variables.

#### **Results**

Enacting social support to take breaks from work was associated with affective well-being and creative ideas generation, and inversely associated with fatigue. Enacting social support to take breaks mediated associations between enacting job control to take breaks and well-being, fatigue and creative ideas generation.

#### **Limitations**

Although typical of experience sampling studies, the present study is limited by a small sample size and the focus on just one working week.

#### **Research/Practical Implications**

The present study suggests interventions to enhance recovery within the working day should enhance both the opportunity to exercise discretion over when breaks are taken and the opportunity to engage in social interaction during those breaks.

#### **Originality/Value**

The present study is one of the few studies to examine recovery activities (taking breaks) within the working day, and the first to link enacting job control to enacting social support to take breaks.

### **Daily positive events at work: Their impact on daily job performance and daily well-being after work**

Evangelia Demerouti (Eindhoven Univ. of Technology) [e.demerouti@tue.nl](mailto:e.demerouti@tue.nl)

#### **Purpose**

It is often argued that daily work events positively influence our performance at work and the way we feel when we come home. Research so far has hardly explored how this favorable effect can be enhanced through the influence of possible moderators. Building on Affective Events Theory, it is hypothesized that job involvement and positive work reflection will enhance the favorable effect of positive emotions (related to a positive work event) on job performance and well-being (vigor and dedication at home).

#### **Design/Methodology**

To test these assumptions, employees from different occupations filled in a general questionnaire and a diary for three consecutive working days after work and at the end of the day.

#### **Results**

Multilevel analyses conducted with MLwiN supported the moderating effect of job involvement in the relationship between posi-

tive emotions during work and contextual but not task performance. Moreover, positive work reflection moderated the relationship between positive emotions during work and vigor and dedication at the end of the day.

#### Limitations

It remains to be tested whether the favorable effects on job performance would also be confirmed when using other-ratings rather than self-ratings of performance.

#### Research/Practical Implications

These results imply that employers and employees can profit by enhancing the involvement in and the positive reflection on the work.

#### Originality/Value

This is the first study that examines how the impact of positive events at work can be maximized.

### **When does work engagement foster performance? A diary study among naval cadets**

*Arnold Bakker (Erasmus Univ. Rotterdam) [Bakker@fsw.eur.nl](mailto:Bakker@fsw.eur.nl), Jørn Hetland (Univ. of Bergen), Olav Kjellefold Olsen (Univ. of Bergen), Roar Espesvik (Univ. of Bergen)*

#### Purpose

Previous studies have indicated that daily / weekly work engagement is predictive of job performance. The present study used the performance episodes model to hypothesize that daily work engagement would be positively related to other-ratings of performance under certain specific working conditions (high work pressure, high autonomy). Thus, this is one of the first studies qualifying the daily engagement – performance relationship.

#### Design/Methodology

Data were gathered from 54 naval cadets. Participants filled in a background questionnaire and a daily diary questionnaire during a

cruise that lasted 33 work days. In addition, trainers independently rated cadets' weekly performance.

#### Results

As predicted, when work pressure was high, engagement was positively related to performance. In contrast, when work pressure was low, or when autonomy was low, engagement was negatively related to performance. The hypothesis that engagement would be positively related to performance when autonomy is high was rejected.

#### Limitations

Whereas the performance episodes model assumes a close link between focus on the task and performance, we could only collect weekly (and thus aggregated) observations of job performance.

#### Research/Practical Implications

Daily work-related vigor, dedication and absorption can improve job performance when employers offer sufficient challenges and autonomy.

#### Originality/Value

These findings add to the literature by showing that the work context determines whether engagement can be translated into high levels of job performance.

### **Team work engagement: its antecedents and relationship with team effectiveness**

*Patrícia Lopes Costa (ISCTE-IUL) [patricia.lopes.costa@gmail.com](mailto:patricia.lopes.costa@gmail.com), Ana Margarida Passos (ISCTE-IUL), Arnold Bakker (Erasmus Univ. Rotterdam)*

#### Purpose

Team work engagement was recently proposed as a relevant construct in the field of work psychology and organizational behavior. The present paper aims at empirically testing two hypothesized antecedents of team work engagement (identification with the team and

norms for displaying positive emotions) and its relationships with team performance, satisfaction and viability. We propose that team work engagement is as mediator between the suggested antecedents and team effectiveness.

#### Design/Methodology

The proposed model was tested with a sample of 167 teams, participating in a management simulation challenge for a period of 5 weeks. Questionnaires were emailed to the participants in the end of each week and data were aggregated to the team level.

#### Results

Results suggest that both identification with the team and norms for displaying positive emotions are significantly positively related with the emergence of team work engagement. Moreover, significant mediations were found for team work engagement between those variables and team performance, satisfaction and viability.

#### Limitations

Data was not collected from teams working in real-life settings but from teams participating in a simulation.

#### Research/Practical Implications

Results imply that researchers should also look at the team level of work engagement since it has important connections to team effectiveness. Besides, understanding the mechanisms underlying team work engagement will help managers and team leaders from all the types of organizations to shape energetic, motivated and focused teams.

#### Originality/Value

To our knowledge, this is the first study to propose and empirically test a model for the emergence of team work engagement.

### **Employee adaptation to change: The value of change resources and meaning-making over time**

*Machteld van den Heuvel (Utrecht Univ.)  
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(Eindhoven University of Technology), Arnold Bakker  
(Erasmus Univ. of Technology), Wilmar Schaufeli  
(Utrecht Univ.)*

#### Purpose

This 3-wave study examined employee adaptation to change over time. We combined Conservation of Resources theory with the organizational change literature to study employees in a Dutch police-district undergoing reorganization. Change information and meaning-making were included as change resources. Resources were hypothesized to predict adaptation outcomes, i.e. willingness to change and adaptivity (both during and after implementation).

#### Design

We measured before (T1), during (T2), and after change implementation (T3). Using AMOS, a model was tested where resources predict adaptation over time. Different indirect effects were tested.

#### Results

SEM analyses supported most hypothesized relationships between resources and outcomes. However, relationships were not all the same from T1 to T2 and from T2 to T3. A significant indirect effect of T1 change information on T3 adaptivity via T2 meaning-making was found.

#### Limitations

This study was conducted in a police-organization, possibly limiting generalizability of findings. Ideally, objective measures of adaptivity should be included in addition to the self-report measures. Finally, including other resources (e.g. participation, change-efficacy) will further increase understanding of the adaptation process.

### Practical Implications

Important finding is that change information will trigger employees to 'digest' the information using meaning-making. This adds to knowledge on the adjustment process. It is important for organizations to facilitate meaning-making during organizational change, e.g. via focus groups or coaching.

### Originality

A new resource (meaning-making) was included, which predicted adaptation over time. Using a three-wave design, we showed that resources function differently before and during change, and that resources during change are particularly important for adaptation.

## Identity: New Insights and Perspectives

Session Chair: *Rosalind H Searle (Coventry Univ.)*  
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Extant research identifies the positive implications of organizational identification for firms. While interest in this topic has grown, there are still a number of key gaps concerning the process and dimensions of identification, especially a recent call to consider in more detail the impact of individual differences on identity (Cooper and Thatcher, 2010). This symposium includes four interrelated papers that take and explore distinct aspects of the puzzle. First, Van Dick et al set the scene for identification and present findings from two studies extending insight through an expanded model of organizational identification. This is developed further in the next paper by Egold and Van Dick to look at occupational category. Searle and Price then consider the issue of multi-foci identification, at organizational, team and profession level and outline the influence of personal motives on identification in the oil and gas industry. This paper then sets the back ground for the final paper which is Highhouse et al's community based study

that develops further understanding of individual difference dimensions on identification. To do this they examine the impact of personal motives for occupational and organizational preferences and also then decision choices in a longitudinal study. Their study reveals how these motives can create the basis for bias. The symposium will be organized with individual papers allocated 20 min for their presentation and questions, followed by a 10 minute opportunity for more general audience participation and questions. This final process will be led by the chair.

### ***Presentations of the Symposium***

#### **Problematic forms of organizational identification: Some evidence for the expanded model of identification**

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#### **Purpose**

A large literature documents that organizational identification has positive implications for organizations. Kreiner and Ashforth (2004) proposed a theoretical model which argues that there exist three additional, non-redundant aspects of identification beyond self-stereotyping. Kreiner and Ashforth (2004) demonstrated that ambivalent identification, neutral identification, and disidentification can be theoretically and empirically separated.

#### **Design/Methodology/Results**

We present two studies that extend the evidence for the validity and utility of the expanded model of organizational identification. In the first study, 3500 members of all major political parties in Germany completed Kreiner and Ashforth's (2004) scales with regard to their identification with their party. We found support for the proposed four-factorial structure using abbreviated scales. We also present evidence for the divergent validity of the

scales in terms of susceptibility to positive or negative experiences (i.e. election results) and of differences in perceived P-O-fit. In a second study, an experimental design was used. A heterogeneous sample of 308 employees was randomly assigned to groups either primed on positive aspects of their work or on negative aspects of their work ("dirty work"). We found that the experimental condition did influence ambivalent and disidentification moderated by participants' core self-evaluation.

**Research/Practical Implications**  
Managers in organizations would benefit from considering the impact of their actions not only on traditional identification but also on the other forms in the expanded model.

#### Originality/Value

This is one of the few studies that have empirically used Kreiner & Ashforth' model and combine a large sample survey with an experimental study.

### **Expanding the expanded model of identification: Organizational identification and identification with an occupational category**

*Nikolai Egold (Fresenius Univ. of Applied Sciences) [egold@hs-fresenius.de](mailto:egold@hs-fresenius.de), Rolf van Dick (Goethe Univ.)*

#### Purpose

Examining social identification in the workplace plays an important role in work and organizational psychological research. Kreiner & Ashforth (2004) proposed three additional forms of organizational identification: neutral, ambivalent and disidentification. We transfer the idea of different forms of identification to another focus, that is the occupational group.

#### Design/Methodology/Results

We provided 246 employees with the scales of Kreiner & Ashforth with respect to two foci of identification, i.e. the organization and occupation (OC), as targets of self-categorizing. We

also measured need for identification, positive and negative affectivity, tenure, intra role conflict, role ambiguity and individualism as antecedents of the different forms of identification and job satisfaction, wellbeing and work engagement as consequences. We demonstrate that the correlations of the antecedents and consequences for all four different forms of identification with a professional category were not as strong as for organizational identification.

#### Research/Practical Implications

Disidentification and ambivalent identification with a professional category do have negative effects in the same way as organizational identification has.

#### Originality/Value

This is one of the few studies that have empirically used Kreiner & Ashforth' model and expand it to another relevant focus in the workplace.

### **With what do you identify? The effect of self-presentation needs on multi-foci identification**

*Rosalind Searle (Coventry Business School) [Rosalind.searle@coventry.ac.uk](mailto:Rosalind.searle@coventry.ac.uk), Deborah Price (De Montfort Univ.)*

#### Purpose

Existing perspectives on identity have under-theorized the particular processes from which distinct levels of identification emerge. This lacuna is addressed by studying personal motives of prestige and value congruence of identification processes, and view this relationship at three distinct levels - the organisation, workgroup and profession.

#### Design/Methodology

two studies – a survey and in-depth interviews are used to examine the impact of personal motives within the UK's oil and gas sector. Data concerning these motives is differentiating two forms of self-presentation need, con-



cern for status and for respectability at the three aforementioned levels of identification. Survey results from 145 employees offer further insight into the influences on the multi-foci identifications of employees, while the qualitative interviews add a rich narrative around these insights.

#### Results

Specifically, we found that the contextual factors of prestige and value congruence had a high and significant impact on identification, especially following a period of high profile failures. Our survey and interview data identify how personal motives, particularly concern for responsibility, are an often overlooked factor in identification.

#### Limitations

While cross sectional design is a limitation for our survey, the impact of common methods variance was assessed in the analysis. The additional interviews go some way to offset this.

#### Research/Practical Implications

Practical implications regarding hiring and retaining staff in a sector characterised by high turnover are raised and an agenda for further research developed.

#### Originality/Value

This paper offers a novel contribution to the field through both its multi-foci design and the inclusions of personal motives.

### **Self-presentation motives in decision making**

*Scott Highhouse, (Bowling Green State Univ.) [shighho@bgsu.edu](mailto:shighho@bgsu.edu), Sarah R. Kirkendall (Bowling Green State Univ.), Scott A. Withrow (Bowling Green State Univ.), John A. Kostek (Bowling Green State Univ.)*

#### Purpose

Existing measures of individual differences in evaluation apprehension do not focus on the

desire to create a specific impression. Tetlock (1991) suggested two self-presentation motives: desire for approval, and desire for status. These correspond with those independently identified in a long tradition of research on impression management, personality, and social cognition.

#### Design/Methodology

Three studies were conducted using Amazon's Mechanical Turk to (a) develop a measure of self-presentation motives, (b) examine the validity of inferences from the measure, and (c) use the measure at Time 1 to predict responses to choice dilemmas at Time 2.

#### Results

Our research suggests that the profile of a person high on desire for approval is agreeable and conscientious, places high importance on being a member of a social group, and is attracted to jobs that are in honorable enterprises. People high in desire for status are materialistic and unimaginative, preferring to work in enterprises that impress other people. Administration of the scale to a sample at Time 1 predicted responses to choice dilemmas at Time 2. In general, desire for approval amplified, and desire for status attenuated, biases caused by lack of scrutiny. Desire for status amplified a bias associated with fear of looking foolish.

#### Research/Practical Implications

Concerns over how others view us influence how we manage impressions, how we respond to emotional labor, and where we choose to work.

#### Originality/Value

As Leary (1995) noted, "Few aspects of people's behavior are unaffected by self-presentational motives." This is the first measure of these motives.

## Motivation and Choices: Antecedents and Causes of Regulatory Focus and their Impact on Work Choices

Session Chair: *Michal M Schödl (The Hebrew Univ. of Jerusalem & IL/Ben Gurion Univ.)*  
[schodl2@barak.net.il](mailto:schodl2@barak.net.il)

Facilitator: *Avraham N Kluger (The Hebrew Univ. of Jerusalem, IL)* [avik@savion.huji.ac.il](mailto:avik@savion.huji.ac.il)

Self-Regulation Theory (SRT) has proven extremely useful in explaining various work outcomes such as job satisfaction, innovative performance and affective commitment (Lanaj, Chang and Jonson, 2012). Yet, SRT explanatory potential could both be expanded by considering heretofore ignored features of it, and it could be improved by considering one of its weaknesses: measurement. The proposed symposium offers the following contributions:

- (a) A demonstration that regulatory focus is activated by secure attachment base (Study 1);
- (b) A demonstration of regulatory focus impact on performance under time pressure (study 2);
- (c) A demonstration that more time is consistently allocated to prevention targets rather than to promotion targets, but chronic prevention focus increases the effect (study 3);
- (d) Showing how regulatory focus affects individual behavior in social dilemmas (study 4);
- (e) A demonstration of deviations from prospect theory predictions, depending on the type of goals (prevention-minimal and promotion-maximal goals) (study 5); and
- (f) A presentation of the validation of a new scale for chronic regulatory focus, based on a novel approach for measurement (study 6).

One of the challenges of tomorrow's working world is the coping with overload and with time pressure resulting from multiple competing tasks, targets, and dilemmas. Choosing among tasks and coping with dilemmas could be understood by offering advancement in using Regulatory Focus Theory (Higgins, 1997).

### ***Presentations of the Symposium***

#### **The impact of secure attachment on regulatory focus and choice of work tasks**

*Michal Lehmann (The Hebrew Univ. of Jerusalem, IL)* [chikush@gmail.com](mailto:chikush@gmail.com), *Avraham N Kluger (The Hebrew Univ. of Jerusalem, IL)*

Higgins' self-regulation theory suggests that activating promotion focus with nurturance needs, as opposed to prevention focus with security needs, may increase explorative behavior. Similarly, Bowlby's attachment theory suggests that exploration is increased when people have secure attachment (nurturance needs met). Based on these similar theoretical predictions, we hypothesized that attachment security, and specifically employees experiencing their managers as provider of a secure base, will increase promotion focus.

#### **Design/methodology**

We ran an experiment (N=53) with two scenarios primes: The scenarios describe an encounter with one's boss that was characterized as producing either a secure or insecure base. Then, respondents were presented with a list of prevention and promotion tasks and were asked to rate the likelihood that they would perform each task.

#### **Results**

The secure base manipulation increased the likelihood of engaging in promotion tasks relative to the insecure base manipulation ( $t(51) = 2.43$ ;  $p < .02$ ;  $d=.67$ ) but did not affect the likelihood of engaging in prevention tasks ( $t(51) = 0.67$ ;  $p < .50$ ;  $d=.18$ ).

### Limitations

The experiment considered neither individual difference in attachment style, nor in regulatory focus. Such an improved experiment is now being carried out and will be available at the time of the conference.

### Research/Practical Implications

Theoretically, this work explores untested predictions from two established theories and points for a potential way of integrating them. Practically, encouraging employee creativity and exploration may require investment in creating psychological safety for subordinates.

### Originality/Value

To our knowledge, the above prediction and the combination of the Self Regulation theory and Attachment theory were never tested.

## Motivation and performance under time pressure

*Marieke Roskes (Ben Gurion Univ. of the Negev, IL) [M.Roskes@uva.nl](mailto:M.Roskes@uva.nl), Andrew Eliot (Univ. of Rochester), Bernard Nijstad (Univ. of Groningen), Carsten de Dreu (Univ. of Amsterdam)*

Striving to avoid failure, as opposed to striving for success (avoidance- vs. approach-motivation), has been associated with a variety of detrimental consequences. Avoidance motivation evokes systematic thinking, which can enhance performance when attention to detail is required, but requires cognitive resources and taxes energy. Performance under avoidance-motivation relies strongly on cognitive resources, and we expect it to be fragile and easily undermined by cognitive overload when working under time pressure.

### Design/ Methodology

In five experiments, we measured individual differences in avoidance-motivation, or evoked avoidance-motivation by confronting people with potential losses (versus gains), and assessed creative, analytical, and detail-oriented performance.

### Results

Across all task types, performance was undermined by time pressure particularly when people were avoidance-motivated. Evidence indicates that reduced availability of cognitive resources produced this effect, and not stress-related emotions.

### Limitations

We did not include a neutral control condition, as it is difficult, if not impossible to construe a goal without providing direction (i.e., approach vs. avoidance).

### Research/ Practical implications

This project advances theory on processes evoked during goal striving, and its consequences. People are often confronted with tight deadlines. When allocating time to tasks, it may be useful to take the focus (on success vs. avoiding failure) into account. In general, working under avoidance-motivation is fragile and costly, and is best used sparingly.

### Originality/ Value

Avoidance-motivation can be useful, and mobilize energy for averting danger and losses. However, our work highlights its fragility, and shows deleterious consequences for performance under pressure.

## Chronic regulatory focus impact on time allocation for interesting vs. obligatory tasks

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According to regulatory focus theory promotion-focused individuals are more concerned with ideals than with oughts, whereas the opposite is true for prevention-focused individuals. However in everyday life people are often required to invest effort in both ideals and oughts. In such case, we hypothesize, that people will allocate more time to oughts than to ideals (H1). However, their chronic-

regulatory focus will moderate this effect such that the more promotion-focused one is, the less one will prefer the oughts over the ideals (H2).

#### Design/ Methodology

Two studies were conducted to test these hypotheses. In Study 1, 123 undergraduates were introduced with six time-allocation dilemmas in which they asked to allocate a fix amount of time between ideal and ought targets. Their chronic-regulatory focus was measured several weeks earlier.

In Study 2, 93 undergraduates were addressed just before their final exams and were asked how much time they intent to allocate to studying for : (1) a course that they study out of interest (ideal) and (2) a course they study just because they have to (ought). Difficulty levels of both courses and chronic-regulatory focus were measured several weeks earlier.

#### Results

The results supported both H1 (study 1 & 2) and H2 (Study 2): In general people allocated more time for ought than for ideal targets (t-levels ranged between -1.86 to -12.33;  $p < .05$ ). In addition, the preference of the ought course over the ideal course was greater among high-prevention individuals ( $t = -3.37$ ;  $p < .01$ ) than low prevention-focused individuals. Conclusions and limitations will be discussed.

### **Not mere goals: Mininal and maximal goals as reference points**

*Steffen R Giessner (Rotterdam School of Management Erasmus Univ., NL) [sgieessner@rsm.nl](mailto:sgieessner@rsm.nl), Daan Stam (Rotterdam School of Management Erasmus Univ., NL)*

Kahneman & Tversky's influential Prospect Theory (Kahneman & Tversky, 1979) has been applied to, and subsequently profoundly changed, many research areas including risky decision making, decision making under igno-

rance, consumer preferences and social comparison. Further the theory has been applied explain goal setting and self-regulation processes. It is assumed that goals can be seen as reference points within Prospect Theory and consequently inherit the properties of the value function. In this research we predict that the properties of loss aversion and diminished sensitivity, though applicable to goals, change with different types of goals (i.e., reference points).

#### Design/Methodology

Our hypotheses are tested in an experimental, laboratory study with students from a Dutch business school.

#### Results

Participants show less diminished sensitivity (i.e., less impact of the deviation from the reference point) when confronted with a minimal goal (i.e., a goal that relates to prevention focus) than when confronted with a maximal goal (i.e., a goal that relates to promotion focus) in the case of failures, but they show more diminished sensitivity in the case of a success.

#### Limitations

We made use of an experimental design implying a more artificial environmental context that reduces potential generalization.

#### Originality/Value

The current research qualifies predictions from prospect theory for self-regulation towards goals by focusing on the nature of reference points.

### **Regulatory focus measurement - The hidden correlations inside orthogonal structure**

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Regulatory Focus (RF) theory (Higgins, 1997) suggests that promotion focus and prevention focus are orthogonal. Indeed, the weighted average correlation between promotion and prevention was estimated in a meta-analysis as  $\rho=.11$  ( $N=25,686$ ) (Lanaj, Chang & Johnson, 2012). However, 89.4% of the variance of these correlations was estimated to be true with a large 95% credibility interval  $(-.40/.61)$ . To explain this, we suggest differentiating among outcomes predicted by RF theory and hypothesize that the correlation between promotion and prevention is positive for emotional outcomes and negative for strategic outcomes.

#### Method

We developed a new RF scale focusing on RF outcomes (emotional, strategic and cognitive) and administered it along with five existing RF scales ( $N=434$ ). We tested both a model validating the new scale by comparison to other scales and a model testing our hypothesis about correlations between RF outcomes.

#### Results

The new RF scale loaded, as well as other scales, on latent promotion and prevention variables. Second, consistent with our hypothesis, the standardized covariance coefficient was positive for the emotional outcomes ( $r=0.36$   $p<.001$ ) and negative from the strategic outcomes ( $r=-.47$   $p<.001$ ;  $\chi^2 = 9.2$  (6)  $p<.16$ ; GFI = 0.93, CFI= 0.97, RAMSEA = 0.034 and SRMR = 0.025)

#### Limitations

Future research should relate the three RF outcomes (cognitive, emotional and strategic) to other work-related consequences.

#### Implications and originality

We provide a novel RF measure based on RF outcomes, rather than causes, and empirical results explaining the complexity of RF structure.

### Regulatory focus in social dilemma situations

Stefan Pfattheicher (Ulm Univ., DE) [stefan.pfattheicher@uni-ulm.de](mailto:stefan.pfattheicher@uni-ulm.de), Johannes Keller (Ulm Univ., DE)

In social dilemma situations, individuals have incentives to benefit oneself to the disadvantage of the collective. Applying regulatory focus theory, the present research addressed the hypothesis that vigilant, prevention-focused self-regulation fosters individuals' tendency to invest private resources to punish non-cooperative interaction partners - individuals who did not appropriately contribute to a group project. This tendency has been termed costly punishment and reflects a willingness to invest personal resources to punish defectors even under conditions where future interactions with the relevant interaction partner are excluded.

#### Design/methodology

In a series of studies (overall  $N = 419$ ), the assumption was tested that prevention-focused self-regulation builds a basis for costly punishment. Chronic prevention-focused self-regulation was measured. Public goods games with the option to punish costly were carried out afterwards.

#### Results

We consistently found support for the proposed positive relation between prevention-focused self-regulation and the tendency to engage in costly punishment.

#### Limitations

The studies remain silent regarding causality, that is, prevention-focused self-regulation was measured but not manipulated.

#### Research/Practical Implications

Findings indicate the great relevance of self-regulatory orientations in the interpersonal setting of social dilemmas and suggest that vigilant, prevention-focused self-regulation

plays a crucial role in the context of public goods and sanctions that enforce cooperation.

#### Originality/Value

Self-regulatory orientations have been almost completely neglected in the research on social dilemmas. In this sense, the current work contributes to a better understanding of costly punishment which is quite important given that this kind of behavior is known to foster cooperative behavior in a remarkably strong way.

## Implicit Motives at Work in Organizations

Session Chairs: *Mattdias Strasser (Technische Univ. München) [strasser@wi.tum.de](mailto:strasser@wi.tum.de), Hugo M. Kehr (Technische Univ. München) [kehr@wi.tum.de](mailto:kehr@wi.tum.de)*

#### State of the Art

Implicit motives are unconscious needs, which are aroused by situational cues and become manifest in affective preferences. Satisfaction of implicit motives is a necessary condition for motivation, well-being, health, and performance at work. Recent theorizing and empirical results have brought the concept of implicit motives back to the attention of W&O scientists and practitioners. Dual motive theory and its implications regarding work performance, leadership, social behavior, motive-supply-fit, and optimal experience at work have renewed the interest in both antecedents and consequences of motive formation and motive arousal. Recent advances in the assessment of implicit motives now allow for a broad use of motive-related measures and interventions.

#### New Perspective/Contribution

The symposium brings together various perspectives regarding implicit motives at work. The first presentation shows affective and motivational consequences of motive-supply-fit at work, thereby contrasting implicit and explicit motive satisfaction. The second presentation focuses on the compatibility of

leader behavior and follower motives. The third presentation discusses psychometric properties and the applicability of implicit motive measures by using IRT modeling techniques. The fourth presentation addresses relational framing effects on work motivation and the arousal of social motives. Last, the fifth presentation emphasizes the importance of motive dispositions for networking behaviors.

#### Conclusion and Implications for Research/Practice

The symposium extends the scope of applied implicit motive research, both methodologically and theoretically. It offers fresh impulses for workplace application, including the organization of work relationships, the application of implicit motive measures, management of networking behaviors, and motivational job (re-)design.

### ***Presentations of the Symposium***

#### **Implicit versus explicit motive-supply-fit at work – Theoretical arguments and initial empirical findings**

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#### Purpose

Dual motive theory (McClelland, Koestner & Weinberger, 1989) suggests that implicit and explicit motives are aroused by two different types of incentives at work. Thus, two types of motive-supply-fit can be distinguished: Implicit motive-supply-fit involving task incentives and explicit motive-supply-fit involving social incentives. In a given work situation, motivation and well-being should be higher in case of a high implicit or explicit motive-supply-fit compared to a low motive-supply-fit.



**Design/Methodology**

In a study with N=60 workers, implicit motives were measured via the Picture Story Exercise and explicit motives via the German Personality Research Form. Using the event reconstruction method (Grube, Schroer, Hentzschel, & Hertel, 2008), workers received four vignettes asking them to remember achievement- or affiliation-related work situations that were expected to offer implicit or explicit incentives (2 x 2-design).

**Results**

The results were consistent with our expectations. Explicit achievement motive-supply-fit was significantly and positively correlated with flow experience and lack of negative affect only in work situations offering explicit achievement incentives. Implicit affiliation motive-supply-fit was significantly and positively correlated with flow experience and positive affect only in work situations offering implicit affiliation incentives.

**Limitations**

Workers reconstructed events from their memory, i.e., worker's experience was not measured directly in the work situation. Moreover, the small sample limits statistical power, requiring larger replication studies.

**Research/Practical Implications**

Research on motive-supply-fit should consider implicit motives. Practitioners should be conscious about differential impact of task and social incentives.

**Originality/Value**

This study is the first contrasting effects of implicit and explicit motive-supply-fit at work.

## **Using thurstonian IRT models to model the response process in implicit motive measures: Implications for reliability and the prediction of work-related outcomes**

*Jonas W. B. Lang (Maastricht Univ.) [Jonas.Lang@maastrichtuniversity.nl](mailto:Jonas.Lang@maastrichtuniversity.nl), Ingo Zettler (Univ. Tübingen), Christian Ewen (Univ. Bonn), Ute R. Hülshager (Maastricht Univ.)*

**Purpose**

An important barrier for a broader use of implicit motives in the context of work and organizational psychology has long been the notion that the internal consistency reliability of implicit motive measures relying on coding imaginative verbal behavior like the thematic apperception test is limited. In this study, we build on recent advancements in IRT modeling and employ a Thurstonian IRT approach to model the response process in implicit motive measures and reassess their internal consistency reliability.

**Design/Methodology**

We fitted the proposed Thurstonian IRT model to one recent and one archival dataset that both included work-related criteria. The model categories included achievement, affiliation, power, and non-motive or other motive content as the reference category, and random effects for pictures and persons.

**Results**

Empirical IRT reliability estimates exceeded .60 for all motives. IRT theta motive estimates were highly correlated with corresponding raw motive scores (>.80) but had a different pattern of motive-motive intercorrelations. Results for the prediction of criteria were commonly similar for single motives but frequently changed when more than one motive was entered into regression equations.

**Limitations**

IRT reliability estimates of .60 are still below the common standard for questionnaire measures (>.70).

**Research/Practical Implications**

The findings suggest that implicit motive measures are reliable. The suggested approach allows researchers to more precisely estimate implicit motive scores.

**Originality/Value**

The proposed approach is the first IRT modeling approach of which we are aware that yields empirical IRT reliability estimates that exceed .60 for implicit motives.

**Compatibility of follower motives and leadership style**

*Dorena Amann (Technische Univ. München) [amann@wi.tum.de](mailto:amann@wi.tum.de), Hugo M. Kehr (Technische Univ. München)*

**Purpose**

Even though a considerable body of research shows positive effects of transformational leadership styles on performance, satisfaction, and well-being of both followers and leaders, the mechanisms underlying these effects are largely unidentified. We predict that these effects are influenced by a compatibility of followers' motives and the application of specific leadership styles. Specifically, we hypothesize that followers' power, affiliation and achievement motives should be aroused by the transformational leadership styles Inspirational Motivation, Individual Consideration and Intellectual Stimulation, respectively, and that a fit between these leadership styles and individual motive strength should affect both follower performance and attribution of leader charisma.

**Design/Methodology**

First, we score the motive content of scientific texts on transformational leadership styles to strengthen the theoretical bonds between the concepts. Second, we experimentally test the hypothesis that follower perceptions of leader charisma and followers' performance are de-

pendent on the compatibility of leader behavior and follower motives.

**Results**

Findings of our literature study support the assumption of specific associations of leadership styles and motives. The results of the ongoing experimental study are discussed with regard to the possible effects on charisma perception and work performance.

**Limitations**

Further research is needed to validate the effects of our study beyond the laboratory setting and in different work-related settings

**Research/Practical Implications**

To motivate employees it is necessary to flexibly adapt various leadership styles to the motives of the followers.

**Originality/Value**

To our knowledge, these studies are the first to consider specific follower motives as an important predictor for performance and leader charisma.

**Relational models and social motives**

*Matthias Strasser (Technische Univ. München) [strasser@wi.tum.de](mailto:strasser@wi.tum.de), Steffen R. Giessner (Erasmus Univ. Rotterdam)*

**Purpose**

Interpersonal Cognition and interpersonal behavior at work are to a great extent affected by individual motives and relational characteristics. We draw upon relational models theory (Fiske, 1992) and dual motive theory (McClelland, Koestner & Weinberger, 1989) to test for specific associations between types of relational schemas and social motives. Moreover, different types of relational schemas should trigger different kinds of motivation, presumably by arousing distinct implicit motives.

### Design/Methodology

In a series of laboratory and field studies, we tested specific interrelations of implicit and explicit motives for achievement (nAch), affiliation (nAff), and power (nPow) and the relational models communal sharing (CS), authority ranking (AR), equality matching (EM), and market pricing (MP). In two experiments, we assessed relational framing effects on social motivation and arousal of social motives.

### Results

Across studies, CS and AR orientations were consistently and specifically associated with nAff and nPow, respectively. MP was related to nPow and nAch. Experimental results revealed that CS framing is able to trigger affiliation motivation, while AR framing arouses power motivation, and MP framing results in achievement motivation.

### Limitations

Although we have extended data from laboratory experiments and online studies, our contribution would benefit from quasi-experimental field studies.

### Research/Practical Implications

(Re-)Framing and structuring work relationships according to distinct relationship types motivates people in distinct ways. These framing effects are strong and persistent. Practitioners should consider relational framing as a means to motivate the right people in the right way.

### Originality/Value

These studies provide first empirical evidence for specific interrelations of social motives and relational models.

## **Implicit motives as determinants of networking behaviors**

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### Purpose

Research has identified networking behaviors, that is, building, maintaining, and using contacts, as an important and viable strategy to enhance career success. With regard to individual dispositions as determinants of networking, studies have exclusively relied on trait measures of personality (e.g., extraversion). To further our knowledge on determinants of networking we use a different theoretical perspective and examine the relationship between implicit motives and networking behaviors. Using a facet theoretical approach to networking behaviors, we predict differential relations of need for power, need for achievement, and need for affiliation with facets of 1) internal vs. external networking and 2) building, maintaining, and using contacts.

### Design/Methodology

We conducted an online study (N = 539 employed individuals) with two measurement times to temporally separate the assessment of implicit motives and networking behaviors.

### Results

Findings show that need for achievement is related to networking in general. In line with theoretical differences between networking facets, we find that need for affiliation is positively related to building contacts, whereas need for power is positively related to using contacts.

### Limitations

Although motives represent stable individual differences that develop early in life, our cross-sectional design cannot make strong claims about causality.

### Research/Practical Implications

We show that networking is not only driven by need for affiliation, but instead achievement and power motives are important drivers of networking behaviors, as well.

### Originality/Value

To our knowledge, this is the first study to link implicit motives and networking behaviors. It broadens our knowledge on how individual differences beyond descriptive personality traits drive networking behaviors.

## Innovative Behaviour in the Workplace: New Perspectives on Predictors, Stage of Innovation Process and Boundary Conditions

Session Chairs: *Adalgisa Battistelli (Paul Valéry Univ. (Montpellier III))* [adalgisa.battistelli@univ-montp3.fr](mailto:adalgisa.battistelli@univ-montp3.fr), *Héctor Madrid (Univ. of Sheffield)* [h.p.madrid@sheffield.ac.uk](mailto:h.p.madrid@sheffield.ac.uk)

### State of the Art

Despite advances in understanding the conditions that foster innovative performance at work, recent reviews pointed out the need for additional studies on individual innovation, aimed at exploring: i) new types of antecedents of innovative behaviour, ii) the relationship of predictors with different stages of the innovation process; and iii) the moderators of the predictor-innovative performance relationship.

### New Perspective/Contribution

The present symposium gathers five papers that provide unique insights into the aforementioned topics. The paper by Montani, Battistelli, and Odoardi explores the moderating role of group-level task orientation in the relationship between proactive goal generation and innovative performance. The paper by Niesen, De Witte, and Battistelli focuses on the role of psychological contract breach in mediating the relationship between job insecurity and innovative work behaviour. The paper by Urbach and Fay assesses the moderating effect of leader-member exchange in the relationship between supervisors' power motive and their intentions to support new ideas

during the evaluation stage of the innovation process. The paper by Madrid and Patterson investigates the interplay of job characteristics and high activated affects in predicting different stages of the innovation process (i.e., idea generation, idea promotion and idea implementation). Finally, the paper by Boudrias, Montani, and Lajoie analyses the impact of job autonomy, information sharing and production ownership on proactive goal generation and subsequent individual innovativeness.

### Conclusion and Implications for Research/Practice

This symposium contributes to the establishment of a research agenda focused on examining new predictors of innovative work behaviour, its boundary conditions, and characteristics of different stages of the innovation process.

## ***Presentations of the Symposium***

### **Innovative work behaviour as a function of proactive envisioning and planning: Cross-level influences of team task orientation**

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### Purpose

Despite advances made in understanding the role exerted by motivational processes in fostering employees' innovativeness at work, studies examining motivation factors other than intrinsic or extrinsic motivation are relatively scarce. The present research investigated the relationship between proactive goal generation, a motivational process encompassing envisioning and planning activities, and innovative work behaviour (IWB). The role of team task orientation (TTO) as a boundary condition associated to planning's effects was further examined. It was hypothesized that: 1)

envisioning and planning would be positively related to IWB; 2) the relationship between planning and IWB would be enhanced by a stronger TTO.

#### Design/Methodology

This study was conducted in a sample of 331 employees from various organizations.

#### Results

Consistent with our predictions, hierarchical linear modelling results revealed that: envisioning and planning were positively associated with IWB; planning's effects on IWB increased when TTO was high rather than low.

#### Limitations

The sole reliance on self-report measures could have led to common method bias, and collection of data at a single point in time did not allow us to address issues of causality.

#### Research/Practical Implications

Our results suggest that proactive goal-regulatory processes can enhance individual innovative performance. The moderating effect of TTO additionally clarifies the boundary conditions associated with the effectiveness of planning as a driver of workplace innovation.

#### Originality/Value

This research is one of the first to provide empirical evidence on the role played goal-directed motivational processes in affecting IWB, as well as to shed further light on the conditions that strengthen planning-innovation relationship.

### **Job insecurity and innovative work behaviour: A psychological contract perspective**

Wendy Niesen (KU Leuven & Univ. of Verona) [wendy.niesen@ppw.kuleuven.be](mailto:wendy.niesen@ppw.kuleuven.be), Hans de Witte (KU Leuven & North-West Univ.), Adalgisa Battistelli (Paul Valéry Univ. (Montpellier III))

#### Purpose

Innovation is considered to be of crucial importance for organisational survival and growth. In this respect, employees can play a leading role, as they are the ones who develop innovative ideas. Still, few studies have explored how innovative work behaviour is influenced by another important contemporary phenomenon: job insecurity. This subjective experience consists of both fears and worries about the loss of the job as such (quantitative job insecurity) and about losing valued aspects of one's job (qualitative job insecurity). The present study examines the relationship between both types of job insecurity and innovative work behaviour and the role of psychological contract breach in explaining this relationship. A negative relationship between qualitative and qualitative job insecurity and innovative work behaviour was expected with psychological contract breach explaining these relationships.

#### Design/Methodology

Participants were 15787 employees from an organisation that had faced major changes during the last years.

#### Results

A direct negative relationship was found between both types of job insecurity and innovative work behaviour. Furthermore, an indirect relationship was found between quantitative job insecurity and innovative work behaviour through psychological contract breach. No such relationship existed for qualitative job insecurity.

#### Limitations

The measurement of all variables through self report questionnaires introduces a potential risk for common method bias, while the cross sectional data do not allow inferences about causality.

**Research/Practical Implications**

Organizations should ensure a feeling of job security in order to maintain employees' innovative work behaviour.

**Originality/Value**

This study is the first to examine the relationship between job insecurity and innovative work behaviour.

**Why good ideas fail: The role of supervisors' power motive and leader-member exchange in idea evaluation**

*Tina Urbach (Univ. of Potsdam) [urbach@uni-potsdam.de](mailto:urbach@uni-potsdam.de), Doris Fay (Univ. of Potsdam)*

**Purpose**

Previous research on innovation has identified various predictors of employees' innovativeness, but yet little is known about what affects supervisors' evaluation of specific innovative ideas from employees. This study investigates whether supervisors' intentions to support an idea depend on the idea's propensity to satisfy (or threaten) their power motive. We further test whether leader-member exchange (LMX) moderates this effect, and whether LMX affects how supervisors attribute an employee's idea proposal.

**Design/Methodology**

We conducted a quasi-experiment with 159 supervisors. We first measured supervisors' trait power motive. Then supervisors read a scenario which described an employee (as high, average, or low LMX) who proposed an innovative idea (power threat vs. power gain for the supervisor). Supervisors rated the level of prosocial intentions they attributed to the employee and their willingness to support the idea.

**Results**

Results mainly supported our hypotheses. When LMX was described as average or high, supervisors' power motive had no effect on

idea support. When LMX was low, highly power-motivated supervisors were far more willing to support an idea that resulted in gaining power compared to losing power. High LMX enhanced the attribution of prosocial intentions which in turn were positively related to idea support.

**Limitations**

As a limitation, results need to be replicated in a field setting using real innovative ideas.

**Research/Practical Implications**

This study adds to our knowledge on the evaluation stage in the innovation process. Organizations should recognize such effects in idea evaluation as they are a potential "bottle neck" within the innovation process, causing good ideas to fail.

**The Dual-Model of Affect and Innovative Work Behavior: How feelings interplay with job characteristics in generating, promoting and implementing novel ideas**

*Héctor Madrid (Univ. of Sheffield) [h.p.madrid@sheffield.ac.uk](mailto:h.p.madrid@sheffield.ac.uk), Malcom Patterson (Univ. of Sheffield)*

**Purpose**

Affect and novel idea generation have been widely investigated, however, the links between idea promotion, implementation and affect remain ambiguous. Idea generation is mostly an intrapersonal process of producing divergent thoughts, while promoting and implementing are interpersonal behaviors that implicate working with others. Thus, we propose that both positive and negative affect high in activation (i.e. HAPA, HANA) will be associated with idea generation. The former broadens flexible cognitions, while the latter sparks persistence in thinking of successful solutions. In turn, promoting and implementing ideas will be related only to HAPA as it provides energy to confront the status quo. Contrariwise, HANA enhances sensitivity to



resistance to change. Finally, affect is proposed as a mediator between job characteristics and innovative behavior. While HANA mediates the relationship between job complexity and idea generation, HAPA mediates the relationship between job control and idea promotion and implementation.

#### Design/Methodology

Two survey studies were conducted in the UK and Chile (NUK=138, NChile=273), and hypotheses were tested using structural equation modeling.

#### Results

In study 1 idea generation was positively related to HAPA and HANA, whilst promotion and implementation were only related to HAPA. This was replicated in study 2, and the mediations of affect between job complexity/control and innovative behavior were supported as expected.

#### Limitations

Given the cross-sectional design of the studies, further longitudinal research is needed to corroborate the results observed.

#### Originality/Value

To the best of our knowledge, this is one of the first studies to test the associations between three dimensions of innovative behavior, affect and job characteristics.

### **Composites of situational features predicting innovative work behaviour: The mediating role of proactive goal generation**

*Jean-Sébastien Boudrias (Univ. of Montréal) [jean-sebastien.boudrias@umontreal.ca](mailto:jean-sebastien.boudrias@umontreal.ca), Francesco Montani (Paul Valéry Univ. (Montpellier III) & Univ. of Verona), Denis Lajoie (Univ. of Montréal)*

#### Purpose

The role exerted by the organizational context in enhancing individual innovative performance at work is well established. Neverthe-

less, most situational predictors have been investigated in isolation for each other, suggesting that further research is needed to assess how composites of contextual features can elicit individual innovativeness (Hammond et al., 2011). Building on a goal regulation perspective, we hypothesized that three situational variables, namely job autonomy, information sharing and directive leadership, would positively and indirectly affect innovative work behaviour by fostering the motivational process of proactive goal generation.

#### Design/Methodology

The present research was conducted in a sample of 397 employees from various companies in different industries.

#### Results

To test the theoretical model we performed Structural Equation Models, which supported our Hypotheses. Proactive goal generation fully mediated the relationship of information sharing and directive leadership to innovative behaviour, and partially mediated the impact of job autonomy.

#### Limitations

Because of the cross-sectional nature of the research design, causal relationships could not be inferred from this study. Additionally, the use of self-report measures could have inflated our results.

#### Research/Practical Implications

Our findings move a step further towards understanding the role exerted by compound situational factors in affecting employees' innovativeness, and help to disclose the motivational processes that can explain context-innovation relationship.

#### Originality/Value

This was the first study to assess the integrated contribution of job autonomy, information sharing and directive leadership on proactive goal generation and subsequent innovative

performance, thereby extending current knowledge on how composites of situational features can enhance individual innovation at work.

## Trust in Hierarchical Relationships in Organizations

Session Chairs: *Estder Gracia* (IDOCAL, Universidad de Valencia, ES) [Esther.Gracia@uv.es](mailto:Esther.Gracia@uv.es), *José Ramos* (IDOCAL, Universidad de Valencia, ES) [Jose.Ramos@uv.es](mailto:Jose.Ramos@uv.es)

In recent years, research on organizational trust had increased quickly, expanding their study on different antecedents and consequences, including various organizational levels. For instance, contributions on trust in previous EAWOP Congresses focused on outcomes, its relationship with HRM or the process of re-building trust. Specifically in the hierarchical relationships, trust becomes an essential attribute because helps to get organizational performance efficiency and conflict resolution (Kramer, 1999; Tyler, 1994).

### Contributions

This symposium aims to deeply examine some emergent issues in trust literature. First, the reciprocity and mutuality phenomenon in trust are considered relevant in research, although additional construct clarification is needed. Second, processes that are involved in trust development in hierarchical relationships. From this starting point, reciprocity, mutuality and congruence of trust are conceptually distinguished. Moreover, fairness and group's competence are considered as antecedents of mutual trust among workers and their managers. In addition, reciprocal trust (managers' trust on subordinates and workers' confidence on their manager) is expected as mediator of service quality-burnout relationship. Then, trust of workers' representatives on managerial board along bargaining is studied as predictor of negotiation strategies. Finally, the role of organizational trust on pro-

cesses of HRM organizational change is studied through qualitative data.

### Implications

Using different methodological approaches (theoretical contribution, cross-cultural, quantitative and qualitative data), this Symposium aims to analyse the role that trust plays in hierarchical relationships. Moreover, it aims to analyse the role that mutuality and reciprocity in this relationships, and how the trust in managers influence the bargaining strategies. Finally, the importance of organizational trust in processes of organizational change is studied.

## ***Presentations of the Symposium***

### **Mutuality, reciprocity and congruence of trust in organizational context**

*Tuija Seppälä* (Univ. of Helsinki, FI) [tuija.seppala@helsinki.fi](mailto:tuija.seppala@helsinki.fi)

#### State of the art

Trust is suggested to enhance organizational performance by facilitating individuals' and groups' performance within organizations. However, a party's trust in another party may cause just harms if the trustee behaves opportunistically and she or he does not fulfill the positive expectations of the trustor. Thus, it has been suggested by different authors that trust need to be mutual, reciprocal or congruent in order to bring the desired outcomes. How these seemingly overlapping concepts are related to each other and how they are different is unclear in the literature on organizational trust.

#### Contributions/Implications

This presentation shows how these concepts have been used in the literature and it makes suggestions for how these concepts should be used in the future so that higher coherence can be achieved within the trust literature.

### **Mutual trust between managers and their service oriented workers in non-profit organizations: What does it reinforce it?**

*Estder Gracia (IDOCAL, Universidad de Valencia, ES) [Esther.Gracia@uv.es](mailto:Esther.Gracia@uv.es), José Ramos (DOCAL, Universidad de Valencia, ES), Vicente Martínez-Tur (DOCAL, Universidad de Valencia, ES), Carolina Moliner (DOCAL, Universidad de Valencia, ES), Agustín Molina (DOCAL, Universidad de Valencia, ES), Inés Kuster (DOCAL, Universidad de Valencia, ES), Natalia Vila (DOCAL, Universidad de Valencia, ES)*

#### **Purpose**

This study focuses in the study of antecedents of mutual trust, as a combination of managers and their group members' perceptions of trust. Specifically, this study proposes that managers' fairness perceived by the group of subordinates and group subordinates' competences perceived by managers are main antecedents for the development of mutual trust perceived by both stakeholders.

#### **Design/Methodology**

This is a field study. 753 service-oriented workers and their managers from 97 non-profit organizations oriented to provide service to persons with intellectual disabilities. Cross-sectional data was analyzed in an organizational level.

#### **Results**

Results of hierarchical multiple regressions showed a positive significant relationship between the interaction of managers' fairness with group member's competence and mutual trust.

#### **Limitations**

The need of testing this model with longitudinal data in order to test causality and results should be taken with caution because this study focused on a kind of non-profit organizations.

#### **Research/Practical Implication**

When managers perceive that their group members are competent and group members perceive that managers treat them with respect and dignity, mutual trust arises.

#### **Originality/Value**

This study moves forward in the knowledge of mutual trust, understood as a mutual perception wherein each party trusts the other. Few researchers have taken into consideration both sides of the relationship (Brower, Lester, Korsgaard & Dineen, 2009) and they have mainly focused on analyzing the consequences of mutual trust (e.g. Brower et al. 2009; Smith & Barclay, 1997).

### **Trust dynamics, climate for innovation, and performance in project teams**

*Ana Cristina Costa (Brunel Univ.) [Ana-Cristina.Costa@brunel.ac.uk](mailto:Ana-Cristina.Costa@brunel.ac.uk), Neil Anderson (Brunel Univ.)*

#### **Purpose**

Trust is a dynamic phenomenon recognized as key to the functioning, climate, and performance of individuals working in teams. While much has been written about trust, only a few studies have studied trust as a dynamic phenomenon and empirically examined its increase or decline over time. The aim is to get insight into the dynamics of trust and its relation with team climate for innovation and performance.

#### **Design/Methodology**

This study takes a longitudinal approach to trust in the context of design-project teams.

#### **Results**

Data from 63 design-project teams reveals that trust starts moderately high at the beginning of projects and tends to decline significantly at the middle, only to increase slightly at the end of the projects. While this dynamic pattern appears not to have a direct effect on

overall team performance, it contributes to the development climate for innovation within the teams. Climate for innovation has a direct effect on different team performance indicators at different project stages.

#### Limitations

MSc student teams and longevity of projects (6 months).

#### Research/Practical Implications

Initial analyses suggest several promising findings and lines for further quantitative investigation. Crucially, trust predicted team climate that, in turn, predicted the independently evaluated variables of knowledge transfer, satisfaction with team progress, overall performance, and product innovativeness.

#### Originality/Value

Few studies have examined these dynamics longitudinally in real, field study settings, and so our initial findings are suggestive of important patterns and changes over time in how trust and team climate interact to predict key factors of team performance.

### **Trust and competitive industrial relations: A cross-national study in Spain and Denmark**

*Lourdes Munduate (Univ. of Seville, ES) [munduate@us.es](mailto:munduate@us.es), Patricia Elgoibar (KU Leuven, BE), Francisco Medina Díaz (Univ. of Seville, ES), Soren Viemose (Kalovig Center, DK), Martin Euwema (KU Leuven, BE)*

#### Purpose

The European Union is facing one of its deepest crises due to the financial and economic turbulence. Social partners, both in profit and non-profit organizations, have to deal with high impact challenges in response to the rapid, and for many dramatic, changes in the environment. In this hostile economic, social and labour environment, management sometimes takes unpopular decisions, putting worker representatives in a place with limited impact

on decisions. Thus, trust that employees and their representatives have in management is deteriorating, leading worker representative in some cases to approach conflicts in a competitive pattern. Europe can't evidently be analysed as a homogeneous entity but should instead be recognised as comprising a diversity of traditions and national cultures. In this study we firstly explore how trust in the management is perceived by worker representatives and employees in each one of these countries. Secondly, we explore the relation between trust in the management and competitive conflict behaviour. Finally, we explore the moderating effect of power distance on the relation between trust and competitive behaviour.

#### Design

The hypotheses are tested on a sample of 719 representatives in Spain and 474 representatives in Denmark.

#### Results

As expected, trust in management is higher in Denmark than it is in Spain, and trust is related to using a competitive approach to conflict. However, this relation varies within the two studied countries.

#### Implications/ value

In this paper, we explore how industrial relation traditions and trade union philosophy could explain these results.

### **Moving towards the future: The impact of organizational structure and organizational trust in the processes of HRM or organizational change**

*Ana Teresa Ferreira (Psychology School, Minho's Univ., PT) [ateresaferreira@gmail.com](mailto:ateresaferreira@gmail.com), José Keating (Psychology School, Minho's Univ., PT), Isabel Silva (Psychology School, Minho's Univ., PT)*

#### Purpose

Recent research stresses the need to increase the focus on the Human Resource Manage-

ment (HRM) processes (Bowen & Ostroff, 2004), and how we can reduce the negative impact of this modifications for workers. Building on Social Exchange Theory and the work by Whitener (1997), we hypothesized that organizational trust (OT) could be an intentional result of HRM interventions, as a facilitator in change processes, in order to diminish the risk perception by the workers and promote adjustment. As far as we know, no research has explored the role of structure and OT in modifications of HRM.

#### Design/Methodology

To explore these ideas, we conducted 10 interviews to managers, from four organizations with comparable structures during major HRM modifications.

#### Results

Our results suggest that mechanistic structures, in spite of their central concern with the standardization of interactions, do not rule out concerns with the development of OT. In organizations where the HRM top manager was in a clear power position, organization-wide trust was an important criterion for monitoring change episodes.

#### Limitations

It remains to be tested how much our results generalize to organizations with this or other type of structure and power of the HRM function.

#### Research/Practical Implications

These results imply that the active development of OT acted as a damping factor in change, reducing the risk perception to employees towards adjustment.

#### Originality/Value

To our knowledge, the research is the first to study the impact of structure and power in the active development of OT as a solution towards adaptation.

## Creativity, Innovation, and Entrepreneurship

Session Chair: *Diana E. Krause (Alpen-Adria Univ.)*  
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Facilitator: *Neil Anderson (Brunel Univ.)*  
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This symposium intends to update the field of creativity and innovation and presents evidence on antecedents of innovation at the individual, team, organizational, and country-level. In the first presentation, Frese, Rosing and Bledow contribute a theory of innovation based on ambidexterity perspective, arguing that individuals, teams, and organizations need to self-regulate and manage conflicting demands of innovation. The second presentation analyses the relationship between self-regulatory processes (self-determination, planning, iterative procedure, positive fantasies) and creative performance in 202 projects from different sectors of the economy. In the third presentation, Potocnik and Anderson focus on individual characteristics (personality, cognitive style, core-self evaluations, job knowledge) that stimulate innovative initiative and the implementation of generated ideas in the health care sector which has important consequences for personnel selection. In the fourth presentation, Kearney offers a new perspective on team diversity and team innovation, which is that faultlines have an impact on a team's level of risk taking. The results of his experiment show that faultline teams make more or less risky decisions depending on the task. The fifth presentation investigates the role of effectuation for radical innovations, which contributes to the research of entrepreneurship and business models. The sixth presentation provides new insights into the leadership-innovation relationship by considering economic factors and cultural practices as mediator variables in the leadership-innovation domain. Variance-based structural equation modeling with data from 55 coun-



tries supports the mediator hypotheses. Overall, it is expected that more than 60 persons will participate in this symposium.

### ***Presentations of the Symposium***

#### **Where are we with? A dialectic theory of innovation**

Michael Frese (National Univ. SG) [frese@uni.leuphana.de](mailto:frese@uni.leuphana.de), Kathrin Rosing (Leuphana Univ.)

Innovation, the development of new and useful ideas by individuals, teams, and organizations, lies at the heart of human adaptation. Research produced a wealth of knowledge about how innovation emerges. This literature leads to one overwhelming summary: Innovation is paradoxical. As a step toward developing an integrative theory, we applied in 2009 a dialectic perspective to innovation to overcome limitations of dichotomous reasoning and to gain a more valid account (Bledow et al., 2009). We would like to give an idea of where we are with this kind of theory. We point out that individuals, teams, and organizations need to self-regulate and manage conflicting demands of innovation and that multiple pathways can lead to idea generation and innovation. Central to our theorizing at this moment are affective shift models and ambidextrous leadership for innovation.

Bledow, R., Frese, M., Anderson, N. R., Erez, M., & Farr, J. L. (2009). A dialectical perspective on innovation: Conflicting demands, multiple pathways, and ambidexterity. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 2(3), 305-337.

#### **How does innovation unfold? The relationship between self-regulatory processes and creative performance**

Ronald Bledow (Univ. Ghent) [Ronald.Bledow@UGent.be](mailto:Ronald.Bledow@UGent.be), Lien Vossaert (Univ. Ghent)

Creative performance is critical for the success of individuals and organizations in dynamic environments. In order to have a positive impact, attempts to increase creative performance need to be based on a well-developed understanding of the psychological processes that underlie creative performance. The present study aims to contribute to this understanding theoretically and empirically. It examines relations between self-regulatory processes and creative performance on real word projects. Based on Personality Systems Interaction Theory processes of self-regulation are specified that uniquely contribute to creative performance: Self-determination, planning, an iterative procedure and positive fantasies. The degree of exploration and exploitation that is demanded in a job is examined as a moderating boundary condition of self-regulatory processes. Hypotheses were tested using the event-reconstruction method with multi-source data of employees and managers on 202 projects in a variety of creative professions and industries. Results of multilevel modeling confirmed the unique positive relations between self-determination, planning, an iterative procedure and creative performance. Planning was most strongly related if a person's job demanded a balanced level of exploitation and exploration. Positive fantasies were only related to creative performance if jobs demanded high levels of exploration. The strengths and weaknesses of the study's method are discussed and the practical implications for facilitating creative performance are discussed.



### Selecting for Innovation: The Role of Individual Characteristics in innovative performance

Kristina Potocnik (Brunel Univ.)  
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Selecting for innovation in the workplace has been acknowledged as an important field in selection and recruitment literature. However the existing research in this field has not yet provided conclusive evidence regarding what individual characteristics are implicated in innovative performance at work. To address this issue, we conducted a field study in health care sector. This research setting was considered as particularly interesting because the changing environment in the health care sector and an increasing number of patients require from the health care professionals to introduce innovations in their daily work. Our sample consisted of nurses who filled in the questionnaire assessing their personality, cognitive style, core-self evaluations, and job knowledge. The innovative performance was rated by their immediate supervisors and was operationalized in terms of both, the suggestions made regarding how to improve the current work practices (first stage in the innovation process) and the implementation of these suggestions (second stage in the innovation process). Supervisors also provided ratings of nurses' overall job performance. Our preliminary findings show interesting results: extraversion, openness, and core-self evaluations are positively correlated with suggestions made whereas agreeableness and conscientiousness correlate positively with the implementation of these suggestions. The implementation is also negatively correlated with neuroticism. Job knowledge correlated positively only with the idea implementation. Both, suggestions and the idea implementation correlate positively with job performance. The implications of these findings for practice

and future research in selection and recruitment will be discussed.

### Do faultlines make teams risk-averse? The influence of team composition on the willingness to take risks on decision-making tasks

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Team diversity is often assumed to hold promise with respect to innovation. In moving beyond a focus on isolated diversity dimensions, Lau and Murnighan (1998) introduced the concept of faultlines – that is, hypothetical dividing lines that split a group into two or more subgroups based on the alignment of member attributes such as demographic or informational variables. In recent years, the association between team faultline strength and team performance has proven not to be as simple and straightforward as was first assumed. Apparently, faultlines do not necessarily have detrimental effects on team outcomes. In this study, I hypothesized that faultlines would influence a team's level of risk aversion. The results of an experiment conducted with 4-person teams of students showed that, on (disjunctive and conjunctive) tasks that had objectively correct answers, high (demographic) faultline teams did not differ in performance from either homogeneous or diverse (but low-faultline) teams. On decision-making tasks with no objectively correct answer, however, the faultline teams made the least risky decisions. Given that the most appropriate level of risk-taking depends on the respective task, risk aversion in the context of entrepreneurship and innovation can be either an asset or a liability. In examining how team composition affects team outcomes on complex tasks, this study underscores the promise of investigating configurations of attributes with respect to which team members may differ from one another.

### **Disruptive innovations and business models as a part of market creation**

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According to Sarasvathy (2001; 2008) following Knight (1921), the future is not only unknown, but unknowable especially if ultimate uncertainty is involved. Dealing with a radical innovation implies dealing with ultimate uncertainty. Radical innovations, which are often disruptive (Schumpeter, 1934) become more and more frequent. The task of entrepreneurs is to transform radical inventions into innovations, i.e. commercial products or services, by means of e.g. strategic/market analysis. Recent research provides evidence that strategic analysis is not applicable for radical, and especially for disruptive innovations. The Innovator's Dilemma (Christensen, 2003) points out that the more successful a firm is, the more likely it is to fail, while confronted with disruptive innovations, because this is a case of market creation rather than market/strategic analysis. We investigate radical innovations as shaping the future through market creation process, which is achieved not by means of analysis, but by non-analytical cognitions, namely, effectuation. We see effectuation as a cognition leading to emergence of radically novel business models, which accompany radical innovations in the process of market creation. By investigating effectuation as a cognitive process behind creation of radical business models our study aims at making contribution to the fields of entrepreneurship cognition research, business model research, and research on radical innovation. The study has important practical implications as well, since business modelling for radical innovations is highly relevant for firms' survival and growth.

### **Participative and team-oriented leadership, countries' education level and national innovation: The mediating role of economic factors and national cultural practices**

*Robert Rossberger (Alpen-Adria Univ.)  
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Previous research on the leadership-innovation relationship is highly heterogeneous and inconsistent. One reason for the inconsistent results is that previous research used different theoretical models, different measurements, and considered a limited amount of contingency variables. The present study intends to provide new insights into the leadership-innovation relation by considering economic factors, national cultural practices, and the educational level of a country at the same time. We propose a model that argues that the impact of leadership (participative leadership and team-oriented leadership) on national innovation (creative outputs and scientific outputs such as patents or new businesses) is mediated by two factors, namely economic factors (specified by GDP per capita) and innovation-related cultural practices within a country (specified by selected GLOBE practice dimensions such as future orientation, in-group collectivism, institutional collectivism, performance orientation, and uncertainty avoidance). Moreover, the model argues that the educational level of a country (specified by e.g., PISA scales in reading, math, & science, pupil teacher ratio, school life expectancy) is related to leadership and economic factors within a country. The models' explanatory power is tested with a sample of 55 countries using variance-based structural equation modeling (PLS). The results show that leadership has no direct influence on national innovation. This relation is mediated by the above mentioned factors. Results also show that the level of education within a country is positively related to participative

leadership and negative to team-oriented leadership. Further, the level of education is directly positive related to economic wealth and indirect to national innovation.

## Building Trust for Tomorrow: The Formation of New Workplace Relationships

Session Chairs: *Lisa van der Werff* (Dublin City Univ., IE) [lvanderwerff@gmail.com](mailto:lvanderwerff@gmail.com), *Finian Buckley* (Dublin City Univ., IE) [finian.buckley@dcu.ie](mailto:finian.buckley@dcu.ie)

### State of the Art

Trust is widely accepted as the key ingredient in social exchange (Blau, 1964) allowing individuals to collaborate without the need to expend time and effort monitoring other parties (Mayer & Gavin, 2005). However, some key gaps exist in our knowledge of how and why trust develops. In particular, the question of whether trust begins at a zero, low or high baseline is still a central dilemma in the literature (Lewicki, Tomlinson & Gillespie, 2006). Furthermore, the cues on which early trust decisions are based need further investigation. Early trust impacts an array of daily workplace interactions: dealing with customers, joining a new organisation or team, and collaborating with other departments or organisations. Yet empirical research examining trust formation at an early stage is sparse, and theories proposing cues that underlie initial trust impressions (e.g. McKnight, Chervany & Cummings, 1998) have yet to be thoroughly tested.

### Contribution/Implications for Research

Using a variety of novel research methods from an internationally diverse group of scholars, this symposium investigates how early trust impressions are formed, at the individual and organizational level, and how they impact employee behaviours over time. We examine early trust experimentally in the first seconds of an encounter, quantita-

tively and qualitatively in the recruitment and selection process, theoretically in knowledge co-creation, and longitudinally in the development of new working relationships.

In doing so, we further understanding of the formation of effective relationships and contribute to the trust and wider organisational literature by providing insight to potential development areas in the workplace of tomorrow.

## Presentations of the Symposium

### Cues for trusting behaviour in new workplace relationships

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#### Purpose and Originality

Traditional theories suggest trust begins at a low or zero baseline and develops gradually over time based on repeated positive interactions (Lewicki & Bunker, 1996). However, organisational scholars have begun to challenge this view and develop alternative theories (Lewicki, Tomlinson & Gillespie, 2006). This research represents the first truly longitudinal test of trust in new relationships.

Drawing on previous theoretical work (Meyerson, Weick & Kramer, 1996; McKnight, Cummings & Chervany, 1998; Kramer & Lewicki, 2010), we propose that trust will begin at a high baseline level and continue to increase over the three months after the first meeting. We hypothesise that early trust will be presumptive, based on information about co-worker roles, the rules inherent in the organisation, and identification with the co-worker group. In contrast, we expect that as relationships develop, trust will be based on more personal cues (co-worker trustworthiness; Mayer & Davis, 1999).

### Methodology

This study follows 193 new recruits through their first three months of employment, measuring changes in trust relationships and trust cue perception across four time points.

### Results

Our hypotheses were tested using latent growth modelling. Hypotheses regarding the baseline and growth pattern of trust were confirmed. Tests of the shift in trust cues over time indicate that early trust is based on different cues than more mature trust, but not in the hypothesised pattern.

### Research Implications

We contribute to the literature by increasing our understanding of early trust and the social, environmental and personal cues underlying trust development.

## **Applicant attraction and organisational trust: The role of trust**

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### Purpose and Originality

Despite contention that the start of a relationship is the “most critical time frame for organizational participants to develop trust” (McKnight, et al, 1998), scant attention has considered applicants' perceptions of organisational trust. Here empirical study is undertaken to address this gap. It tests Searle & Billsberry's (2011) theoretical arguments about recruitment and selection (R&S) as a prime context for trust study, and extends Colquitt et al's (2012) separation of trust and justice into a HR process context to focus on distinct level -organisational trust.

### Design/Methodology

Both qualitative and quantitative data from 318 respondents about their recent R&S experiences is examined.

### Results

Template analysis of responses compares and contrasts factors relating to confidence and vulnerability in the organisation and its process. Importantly perceptions of risk are critically examined to show how often only hindsight enables applicants' awareness of their actual level of vulnerability.

Initial regression analysis of the scale survey results reveal that 25.6% ( $\Delta R^2$ ) of the variance in organizational trust is explained by perceptions of two R&S process dimensions, namely: job relevance of the process and its procedural justice.

### Research and Practical Implications

R&S processes are confirmed as a context in which trust concerns become salient. Trust is important in sustaining ongoing engagement with the firm. The two studies show how applicants use clues and symbols to extrapolate meaning about organisational trustworthiness.

## **Individual and interpersonal conditions in bridging cognitive distance for knowledge co-creation**

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### State of the Art

Literature on trust shows that trust builds naturally among those who are alike, instead of those who are different. Past research on trust cannot explain fast trust in first knowledge encounters among experts with diverse cognitive background. Swift trust (Meyerson et al. 1996) is built on role-based categorization, whereas knowledge creation and innovation context requires tacit knowledge sharing and interpersonal interaction.

### New Perspectives/Contributions

In this paper we take a micro-foundations perspective and model the relationship of individual conditions and interpersonal interaction in knowledge encounters leading to fast trust. Paper provides a conceptual model and theoretical propositions about the interplay of the individual and interpersonal factors enhancing the evolution of fast trust leading to knowledge co-creation across cognitive and socio-cultural diversity.

### Research/Practical Implications

We build an integrated theoretical framework based on the interplay of the individual attributes and interpersonal interaction leading to fast trust. In our framework we provide a more nuanced understanding of the affect-based identification and the cognitive and motivational process leading to fast trust in this specific context. Based on contextual factors, i.e. the type of shared interest and knowledge co-creation we provide competing and/or complementary explanations to fast trust.

### Originality/Value

Paper contributes to the research on trust dynamics as well as integrates research of trust to the literatures on creativity, knowledge co-creation and entrepreneurship. It provides also theoretical propositions for further empirical research.

## Position Papers

### Attributed Causes for Uncivil Incidents: Emotional and Behavioral Outcomes

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#### State of the Art

Although much is known about the consequences of workplace-incivility (e.g., de-

creased evaluations of specific life domains and life in general, lower performance and retention), research hardly examined the specific emotions that result from uncivil interactions at work. This scarcity of research is an unfortunate gap in the literature because specific emotions are of paramount importance for cognition and action and differentially affect individuals' choices and behaviors. It is especially imperative to focus on specific emotional and behavioral reactions to workplace-incivility because incivility is theorized to be the onset of escalating patterns of interpersonal aggression. Yet, accurate knowledge about how victims perceive and respond to uncivil encounters is lacking.

The sparse research on victims' reactions to interpersonal misbehavior lacks a theoretical rationale and has ignored potential reasons for the relationships between uncivil interactions and affective and behavioral consequences. Hence, we propose a model (Figure 1) that explains how and when workplace-incivility induces specific emotions and behaviors based on attribution theory and theory suggesting that different emotions induce different behavioral reactions.

#### New Perspective/Contribution

How individuals react to outcomes of events depends on their attributions regarding the causes of these events. Attribution theory postulates that outcomes of events instigate two distinct processes. The first is a general affective reaction based on whether the outcome is perceived of as a success or failure and includes transitory states such as moods and evaluative affective judgments (e.g., job-satisfaction). The second refers to the more specific emotions that are generated depending on the causal attributions people make for the outcome of the event. As incivility is characterized by an ambiguous intent to hurt the victim, victims are likely to seek to understand why the instigator behaved uncivilly. The

above suggests that workplace-incivility elicits both outcome-dependent broad affective states, and specific, attribution-dependent emotions.

#### Propositions

Attribution theory distinguishes three attributional dimensions: stability, causal locus, and controllability. Stability of an outcome relates to the perceived changeability of its causes. When individuals perceive the causes of negative outcomes to be stable, their expectations for future positive outcomes will be low. Victims who ascribe stable causes for workplace-incivility may, therefore, experience hopelessness (H1).

When workplace-incivility is attributed to unstable causes, the ascribed causes can be internal (the victim) or external (the instigator/the situation), and controllable or uncontrollable. Victims who attribute workplace-incivility to themselves are likely to feel shame or guilt. When they attribute workplace-incivility to a controllable internal cause (e.g., lack of effort to adhere to norms of conduct) they will experience guilt (H2). When they attribute it to an uncontrollable internal cause (e.g., poor interpersonal skills) they will experience shame (H3).

External attributions can be ascribed to the instigator or the situation. When victims attribute causes of workplace-incivility to the instigator, they may experience frustration or anger. When victims ascribe workplace-incivility to causes the instigator cannot control (e.g., poor interpersonal skills), they are likely to feel frustrated (H4). When they believe the instigator can control the cause of the workplace-incivility (e.g., lack of effort to adhere to norms of conduct), they will blame the instigator and experience anger (H5).

Victims who ascribe workplace-incivility to the situation may experience fear, compassion, or anger. If they attribute it to a situational factor

they cannot control (e.g., the organizational culture), victims are likely to experience fear (H6), as they may expect more, unavoidable, uncivil encounters in the future. They could also feel compassion (H7) for the instigator, as she also suffers from the situation and is unable to improve it. Anger is likely to be evoked when the uncivil interaction could have been prevented (H8). For instance, when the instigator behaved uncivilly because her supervisor assigned her too much work.

After summarizing our expectations regarding victims' differentiated emotional reactions to workplace-incivility depending on causal attributions, we propose specific behavioral reactions to workplace-incivility through these emotional reactions.

Hopelessness associates with a present-fatalistic time perspective. Individuals holding such a perspective lack goals, have low levels of energy, and lack the need for excitement, which suggests that they may do nothing but resign oneself to the situation. Hence, when experiencing hopelessness, victims are likely to withdraw from their work (H9).

Individuals who experience shame focus on their stable unfavorable characteristics. In order to defend their self-esteem, they are likely to detach themselves from the negative outcome or event by escaping from the situation, so they can hide their inability to engage in positive interpersonal interactions. Victims experiencing shame may thus withdraw from the social environment at work (H10).

Individuals experiencing guilt focus on negative aspects of their behavior. They are likely to ruminate, wishing they had acted in a different way. Guilt motivates reparative-oriented behaviors and stimulates behaviors aimed at better managing interpersonal relationships through self-development (H11).



Individuals experiencing frustration feel blocked and often take vigorous action to overcome the obstacles. In order to avoid further workplace-incivility, they could craft their job by changing its relational boundaries (H12). Instead of effectively coping with workplace-incivility, they could also withdraw from their work activities (H13).

Anger often concurs with maladaptive aggressive behaviors and may induce workplace-incivility and intentional aggressive behaviors. When anger is caused by workplace-incivility attributed to the instigator, victim's aggressive reaction is likely to be aimed at the instigator (H14). When anger is caused by workplace-incivility attributed to the situation, victim's aggressive reaction is likely to be directed to the organization (H15).

Fear relates to coping behaviors such as escape and avoidance. Therefore, we expect victims who experience fear in reaction to workplace-incivility to withdraw from their work activities (H16).

Victims who feel compassion experience pain or loss because they notice, feel, and respond to another person's suffering. These victims may withhold criticism and communicate sympathy, and even offer the instigator support for dealing with the situation (H17).

#### Conclusion and Implications for Research/Practice

This model gives rise to theoretically driven research on victims' reactions to workplace-incivility and the development of interventions that stimulate adaptive rather than maladaptive responses to workplace-incivility.

#### Achievement Goals in the Workplace: State of the Art and Looking Ahead

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#### State of the Art

How workers define, experience, and respond to competence-relevant situations that they encounter in the workplace is for an important part determined by their achievement goals. During the past three decades, the achievement goal approach to achievement motivation has emerged as an influential area of research, and is dedicated to understanding the reasons behind the individual's drive to achieve competence and performance. However, the findings have been inconclusive due to divergence in achievement domain, achievement goal measures, and the characteristics of the studies, tasks, and samples. Hence, the purpose of this position paper is to present the state of the art on research on achievement goals at the workplace and beyond, to discuss how to broaden and deepen our understanding of job performance from an achievement goal perspective, and to indicate how the current knowledge on achievement goals can be effectively applied in the workplace.

#### New Perspective/Contribution

We extend the scope of previous work in several ways. We present the first meta-analysis of situationally induced achievement goals and performance attainment. Understanding causal relationships between achievement goals and performance attainment is important for both the advancement of the achievement goal approach and the development of interventions that are based on achievement goals. Second, in another meta-analysis on personally adopted achievement goals, we address the moderating potential of achievement domain (work, education, and sports). This is important because the current literature on achievement goals is segmented rather than integrated. That is, citations across achievement domains are more the exception than the rule and similarities and differences between findings for different achievement domains had not yet been tested. Third, sev-

eral types of scale to measure achievement goals have been presented over the past three decades, which has created conceptual ambiguities and inconsistencies in the measurement of achievement goals. We tested the relationships between goals and performance attainment separately for all established measures of achievement goals that have been used in the different achievement domains, including the workplace. Fourth, we examined the moderating potential of specific study characteristics (e.g., the anticipation of feedback and time pressure), task characteristics (e.g., the type of experimental task), and sample characteristics such as age, sex, and nationality. Fifth, we draw upon the  $2 \times 2$  framework for achievement goals in which goals are separated by definition (mastery vs. performance) and valence (approach vs. avoidance). Workers who pursue mastery-approach (MAp) goals focus on self-referenced improvement and accomplishments, whereas workers who pursue performance-approach (PAP) goals focus on performing better than others. Workers who pursue mastery-avoidance (MAv) goals aim to avoid incompetence on the basis of self-referenced standards, whereas workers who pursue performance-avoidance (PAv) goals focus on avoiding failure relative to others.

#### Design/Methodology

We present meta-analyses on personally adopted (Study 1: 90 correlational studies, 313 effect sizes, 38,738 participants) and situationally induced (Study 2: 14 experimental studies, 67 effect sizes, and 2,107 participants) achievement goals, and nonself-report performance criteria. We examined the moderating effects of achievement goal domain, achievement goal measure, and study, task, and sample characteristics.

#### Conclusion and Implications for Research/Practice

Across both meta-analyses, approach goals (either mastery or performance) were associated positively with performance attainment, whereas avoidance goals (either mastery or performance) were related negatively to performance attainment. These relationships were moderated by factors such as achievement domain and scale type (Study 1), as well as by the anticipation of feedback and time pressure (Study 2).

#### Practical implications

Although both approach goals (either MAp or PAP) tend to enhance job performance, achievement goal-based interventions in the workplace should focus in particular on promoting MAp goals for several reasons. First, experimental research on achievement goals suggests that MAp goals have a (marginally) stronger effect on performance attainment than PAP goals. Second, owing to the ubiquity of PAP goals in competence-relevant settings, there is typically no need to promote these goals. Third, in general, the pursuit of MAp goals is considered to be the ideal type of competence-based regulation. For example, MAp goal individuals have been found to have high levels of need for achievement, intrinsic motivation, and task interest, as well as high levels of agreeableness and conscientiousness. Furthermore, MAp goals tend to promote prosocial behavior, such as tolerance for opposing views, and sharing resources with others. In contrast, although PAP goal individuals tend to have high levels of achievement motivation and conscientiousness, PAP goals can involve costs in terms of interest, anxiety, negative affect, dissatisfaction, and neuroticism. Furthermore, PAP goals tend to elicit undesirable outcomes such as opportunistic behavior and cheating. Thus, although PAP goals have consistent positive effects on performance attainment, undesirable social and ethical consequences of these goals might caution practitioners against their promotion.

A MAP goal-oriented motivational climate that directs workers towards intrapersonal standards can be created, for example, by emphasizing evaluation more in terms of progress and effort, by defining success more in terms of improvement, by accepting errors or mistakes as part of the learning process, particularly in training programs, and by emphasizing enjoyment, interest, and collaboration. In this regard, it is important to note that in the workplace, some form of interpersonal evaluation is apparent and even necessary. The key is the extent to which managers emphasize interpersonal versus intrapersonal standards by linking these, for example, to feedback procedures and reward systems. This insight may help business leaders, organizations, and their workers to create effective, successful, and ethical organizations.

#### Research Implications

To increase our fundamental understanding of how achievement goals relate to performance attainment across domains, an important direction for future research on achievement goals will be to use the same measure across the different achievement domains. To optimize conceptual clarity, such a measure could be stripped of any non-goal-relevant language and be rooted exclusively in the two fundamental components of competence: how competence is defined and how it is valenced.

### **Social Recognition of Work: A Significant Dimension of Organizational Behavior**

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#### State of the Art

Although in practical organizational life recognition of work is mostly accepted as a notable way to recognize and acknowledge the employees contribution to the accomplishment of job-related tasks and the achievement of organizational objectives it does not stand at the core of research in the field of work and

organizational psychology. On the contrary in philosophy, sociology and partly in psychoanalytical theories social recognition has been treated as a general and essential part of human social interaction and societal life.

Axel Honneth has attempted to merge the findings of these different disciplines. He states an inherent need of individuals for recognition as an indispensable base for self development and societal integration. He delineates three different types of social recognition whereby the third one – the demand for recognition as a unique person in public social life – is most instructive for psychological theory construction and research in the field of work and organizational behavior. This kind of social recognition occurs when one is respected in virtue of one's membership and contribution in a social group. Recognition of this sort verifies one's social existence as a worthy member of society and promotes self-esteem.

#### New Perspective/Contribution

Defining social recognition in the field of work and organizational behavior needs not to restrict the concept to such terms like appreciation, respect and praise. Social recognition refers to each communication act that recognizes and acknowledges the work of another person. That includes also kinds of constructive and continuative criticism.

Simultaneously the notion of social recognition should be winnowed from other similar concepts like response and feedback and. In the behaviorist notion of response the contribution to the constitution and development of social identity is missed. In the communicational concept of feedback no inherent reference to the object is established. According to Paul Ricoeurs notion recognition is a three-dimensional construct that includes beside the communication partners of mutual recognition the reference to the object of social recognition – in our perspective mainly the

product of work which is recognized within an own corresponding act of cognition.

According to this understanding social recognition of work is addressed to the other as a professional in one's domain of work. Recognizing and acknowledging one's contribution to the societal exchange of achievements the worker is tied to the organization and the society as a valuable member. This leads to self-esteem and professional identity but beyond that social recognition leads to the impression that the contribution of the worker is meaningful and significant for organizational and social welfare.

Furthermore introducing social recognition into the field of work involves a modified understanding of work. Opposite to those concepts which focus mainly the object of a job in this paper work is comprehended as a specific kind of social action. Only in the case work is comprehended as contribution to the exchange of achievements within the society the question of recognition in the field of work arises. Social recognition then turns out to be a determining factor that feeds social integration of the individuals as parts of a differentiated society which can be characterized by division of work and individualization.

During some years of own empirical research in this field some instructive results have been achieved. According to the relation of social recognition and work motivation we found out that that recognition of leaders, colleagues and customers correlates mainly with intrinsic and achievement motivation. No significant correlation was found with social and power motivation. This result matches the theory presented in this paper.

In another study the relation between different modes and types of recognition and leadership styles has been examined. Beside other results it was found that mainly participative leadership uses beneficial ways of social

recognition like appreciation in direct communication, enlargement of responsibility, but also adequate criticism. Authoritarian leadership primarily harks back to reprehension and criticism which is mainly addressed to the person less to the achievement of the job.

Other empirical findings refer to the relation of social recognition and organizational commitment. Significant correlations have been identified between social recognition and affective as well as normative commitment.

#### Conclusion and Implications for Research/Practice

According to the outlined theoretical thoughts and empirical findings social recognition should be one of the major subjects of psychological research in the field of work and organizational behavior. It bundles different main perspectives of work and organizational behavior like job satisfaction, motivation, leadership and organizational commitment. Moreover using the concept of social recognition enables to join constructively the occasionally divergent views of work and organizational psychology.

Implications for practice can be shown with reference to organizational development tools like the appreciative inquiry. Within this method the focus lays mainly on what is done well in an organization. So problems and mistakes are merely not raised. Instead of that questions like "What works well?" or "What's good about your organization?" are posed. Appreciative inquiry avoids limiting organizational change solely to problem solving. So the focus is laid transformational change that envisions processes and practices that will work well in future.

## Single Papers

### Investigating the trade-off between task performance and organizational citizenship behaviors: How supervisors may maintain the social fabric

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#### Purpose

Building on resource allocation theory, research has begun to question the presumed positive effect of organizational citizenship behavior (OCB) on individual performance. Indeed, resources (e.g., time) spent on behaviors that are not directly related to task performance, may be costly to employees. The present study extends this line of research by 1) investigating the impact of two different types of OCB on task performance in an outcome-based reward system; and 2) exploring the role of two different supervisor-related moderators.

#### Design/Methodology

204 sales employees of a large telecom company in China were surveyed. Objective sales data of the following months was obtained.

#### Results

Preliminary results suggest that challenging OCBs (i.e., taking charge) are more negatively related to performance than affiliative OCBs (i.e., helping). In addition, perceived supervisor support for challenging OCBs (i.e., creativity expectations) weakens the negative effect of taking charge. Likewise, leadership behavior emphasizing group interests (i.e., transformational leadership) weakens the negative effect of helping behavior.

#### Limitations

While helping behavior was rated by peers, taking charge was self-rated. In addition, it

may be important to verify our findings in other national settings.

#### Research/Practical Implications

Our results suggest ways in which managers in output-based systems may actively manage the trade-off between striving for output and safeguarding the 'social fabric' of the organization.

#### Originality/Value

The present study extends prior work in three ways: 1) its replication of previous findings in a different outcome-based reward system; 2) its investigation of both challenging and affiliative OCBs; 2) its exploration of moderators.

### The relationships between character strengths and different dimensions of job performance

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#### Purpose

It was hypothesized that character strengths facilitate job performance. Both constructs were investigated considering multiple dimensions (i.e., 24 character strengths; 4 dimensions of job performance) to get a comprehensive overview of their relationships. As different character strengths relate to different pattern of positive behavior, different character strengths were expected to correlate with different dimensions of job performance.

#### Design/Methodology

Two employee samples (N1 = 318; N2 = 108) completed the Values in Action Inventory of Strengths (Peterson, Park, & Seligman, 2005) to measure the character strengths. The Task Performance Questionnaire (Williams & Anderson, 1991), the Job Dedication Questionnaire (Van Scotter & Motowidlo, 1996), the Interpersonal Facilitation Questionnaire (Van Scotter & Motowidlo, 1996), and the Organi-

zational Support Questionnaire (Coleman & Borman, 2000) measured the job performance dimensions. In sample 2, supervisors judged the employees' job performance.

#### Results

Based on this set of two samples replicable associations between character strengths and job performance across self-reports and supervisory ratings were found. For example, perseverance, honesty, self-regulation, teamwork, and prudence consistently correlated with task performance. Interpersonal facilitation was associated with leadership, teamwork, kindness, and fairness.

#### Limitations

Ceiling effects in performance dimensions might have lowered the correlation coefficients.

#### Research and Practical Implications

Character strengths seem to be promising personality traits regarding the prediction of job performance. This opens a new field for research on organizational behavior and personnel development.

#### Originality/Value

To the knowledge of the authors, this is the first study on the relationships between the 24 character strengths and different dimensions of job performance.

### **The role of self-efficacy and job crafting in affecting presenteeism, productivity loss and performance**

#### ***Nominee of the EAWOP Congress 2013 Best Paper Award***

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#### Purpose

The study aims to examine the relationships between individual factors (i.e., self-efficacy

and job crafting) and organizational behaviors, namely presenteeism, productivity loss and performance.

#### Design/Methodology

542 white-collars of a large Italian organization were administrated a two-waves questionnaire, which was subsequently matched with objective data on performance. A series of structural equation modeling tested the impact of self-efficacy (T1) on job crafting (T2) that, in turn, affects presenteeism, productivity loss and performance (T2). Age and gender were included as a control.

#### Results

Self-efficacy is an early predictor of performance and job crafting. In fact, self-efficacy was positively related to the act of increasing activities and social resources (job crafting) whereas was negatively linked to the act of decreasing demands (job crafting). Furthermore, the diverse dimensions of job crafting differently influences organizational behaviors: increasing activities had a positive impact on presenteeism and a negative one on productivity loss; increasing social resources positively influenced performance whereas decreasing demands negatively affected performance. Finally, gender and age were positively related to presenteeism, and age was negatively associated with performance.

#### Limitations

The main limitation is that variables were self-report measures, except for performance as rated by supervisors.

#### Research/Practical Implications

The findings suggest that implementing a training oriented to improve employees' personal resources (i.e., self-efficacy) can be a good strategy to enhance engagement in job crafting, increasing their performance.



## Originality/Value

The study highlights the relevance of self-efficacy as an antecedent of job crafting and contributes to explore how crafting a job affects important organizational behaviors.

**By day and by disposition: The effects of autonomous motivation on wellbeing, engagement and performance at two levels**

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## Purpose

Self-determination theory (SDT) suggests that motivation can be distinguished into five types along a continuum from more autonomous to more controlled motivation. SDT has found increased popularity in work psychology but we know little about how the different forms of motivation relate to affective experience and behavioural outcomes in work. This research examines how the motivation types relate to the two levels of stable motivation tendencies; attitudes and everyday affective experience. Outcomes are: subjective wellbeing, engagement, job performance and task productivity.

## Design/Methodology

UK-based field study. Study 1: Longitudinal survey across three times (N = 123). Study 2: Diary study of 64 respondents (399 diary entries) across a two-week period. Performance was obtained from organisational records.

## Results

More autonomous forms of motivation were consistently related to more positive outcomes. Entirely controlled motivation is related to poorer wellbeing and negatively with performance. Studies reflect on differences between everyday task motivation and general work motivation in relation to stability of outcomes.

## Limitations

Research design assumes conscious processes, rather considering motivation as an unconscious, implicit process.

## Research/Practical Implications

This research provides researchers and practitioners insight into the link between different motivational foci and behavioural and affective outcomes. It expands knowledge of motivational experience at work and supports SDT as a theory of work motivation.

## Originality/Value

I am not aware of any other study which examines motivational outcomes at both task and work level. It also adds to a very limited body of empirical field research in organisational psychology to test SDT as a theory of motivation.

**Job characteristics influence intrinsic motivation via affect and need satisfaction: A daily-diary study**

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Plenty of studies have shown that job demands and resources (JDRM; Bakker & Demerouti, 2007) influence workers' wellbeing. Although many theoretical models originally developed in the context of paid work are considered relevant in voluntary work, studies that apply the JDRM in the latter context are lacking. Moreover, the processes underlying these relationships are not clearly understood in either context. We address these gaps by examining the mediating role of need satisfaction – a core concept within the Self-Determination Theory (SDT; Deci & Ryan, 2000) – in the relationship between job demands, job resources and volunteers' intrinsic motivation. We also investigate whether volunteers' affect explains the effect of job char-

acteristics on need satisfaction. 51 volunteers from a Belgian Youth Movement participated in a diary study (Bolger, Davis, & Rafaeli, 2003) in which they rated volunteer related activities for 10 consecutive days (total data points = 300). As predicted, job demands related negatively, while job resources related positively to volunteers' intrinsic motivation. Moreover, job characteristics evoked an affective reaction in volunteers that consequently influenced the satisfaction or thwarting of their need satisfaction. In contrast to SDT's propositions, only the need for relatedness seemed to be relevant in the case of volunteering. These findings indicate that volunteers' intrinsic motivation can be enhanced by the development of an adequate volunteer work environment, in which special attention is given to their need to belong to a social group.

### **The motivational consequences of the interplay of demand-perception and self-efficacy**

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#### **Purpose**

Our study investigates self-efficacy's motivational consequences by examining within-person fluctuations in self-efficacy and their interaction with demand-perception as an opponent process. Until ten years ago, research has nearly unanimously shown that high self-efficacy is beneficial for motivation and performance outcomes. In the last decade, however, laboratory experiments have shown that the sign and the magnitude of the relationship between self-efficacy and subsequent motivation depend on boundary conditions. Our study adds to this line of research by examining within-person variation in self-efficacy, demand-perception, and work engagement in a field setting.

#### **Design/Methodology**

Using experience sampling for data collection, we obtained data of 82 employees from various organizations three times a day during one working week. We assessed situation-specific demands, self-efficacy, and work engagement.

#### **Results**

Results showed that self-efficacy has to be examined in its dynamic interplay with the perception of demands. Situation-specific self-efficacy was only positively related to work engagement, when employees perceived high demands as well. Moreover, results confirmed the expectation that within-person changes in self-efficacy and demand-perception play a critical role for work engagement.

#### **Limitations**

Limitations stemming from the self-report method are discussed.

#### **Research/Practical Implications**

For being engaged at work, one needs to perceive demands, since this urges one to invest effort. However, effort is only likely to unfold when it is accompanied by a strong sense of self-efficacy that provides the necessary confidence to engage in the situation.

#### **Originality/Value**

In responding to the debate between Bandura and Vancouver, we aim to add insights regarding self-efficacy's motivational consequences.

### **Bouncing back from workplace adversity: Development and test of a moderated mediation model**

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#### **Purpose**

We introduced the concept of workplace adversity and defined it as the occurrence of an

unintentional and unfortunate work-related event that causes an important loss and influences the daily work execution. On the basis of previously conducted qualitative research (Yip & Wilson, 2010), we conceptualized workplace adversity as a four-dimensional second-order construct, consisting of (1)organizational crises, (2)mistakes, (3)career setbacks, and (4)ethical dilemmas. Building on resilience theory (Seery, 2011), we hypothesized that high core self-evaluation (CSE) can offset the negative effects of adversity on performance development, through decreased rumination (i.e., destructively thinking about the adversity).

#### Design/Methodology

The study was conducted in a bank. We developed a scale that measured experienced adversity during the past two years, with three items for each of the four dimensions. Results from exploratory (N1=104) and confirmatory factor analyses (N2=104) provided support for our hypothesized four factor solution. Our hypotheses were tested in a third sample (N3=581).

#### Results

As predicted, CSE moderated the negative relationship between adversity and supervisor-rated performance, controlling for the performance evaluation of the previous year. This moderation effect was mediated by rumination.

#### Limitations

It remains to be tested whether reciprocal relationships exist between experienced adversity and CSE.

#### Research/Practical Implications

These results imply that workplace adversity does not always lead to negative development outcomes.

#### Originality/Value

With the introduction of workplace adversity and the theoretical development of a model of its outcomes, this study opens a new avenue of research and is in line with the recent introduction of positive psychology within OB research.

### **Are culturally intelligent individuals more adaptable? An empirical study in a multicultural environment**

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#### Purpose

Today's rapidly changing and dynamic work environments require an adaptable work force. Adaptability has been extensively researched in relation to individual differences. However, limited research attention has been directed at cultural intelligence — an individual's capability to function effectively in culturally diverse situations — which can facilitate adaptability specifically in a multicultural environment. Since CI and adaptability are conceptually relevant constructs, we hypothesized that CI would predict individuals' adaptive performance in multicultural environments. Furthermore, we examined whether CI would offer additional explanatory power in the prediction of adaptive performance over self-efficacy and prior experience.

#### Design/Methodology

To test our predictions, we sampled 132 Turkish soldiers from the European Union Force, a multinational and multicultural military organization. We collected data at two points in time. At Time 1, respondents completed a survey with measures of CI, self-efficacy and prior experience. At Time 2 (five months later), we measured adaptive performance of the very respondents who filled out forms at Time 1.

### Results

Hierarchical regression analysis supported our hypotheses. CI significantly predicted adaptive performance and explained additional variance in adaptive performance over and above that of self-efficacy and prior experience.

### Limitations

Since participants were soldiers, findings must be replicated in other job types as well as across nationalities for greater generalizability.

### Research/Practical Implications

Results highlight the importance of CI in predicting individuals' adaptive performance which further helps organizations to attain their objectives.

### Originality/Value

To our knowledge, this study is one of the first studies examining the relationship between CI and adaptive performance, and expands the adaptive performance predictors set.

## **Dominant achievement goals in the workplace: Conceptualization, prevalence, profiles, and outcomes**

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### Purpose

(1) To discuss the prevalence of workers' dominant achievement goals (assessed with a forced-choice round robin measure) and the achievement goal profiles (assessed with goal strength ratings) associated with these dominant goals.

(2) To discuss the links between dominant achievement goals and important work outcomes, including job performance, interpersonal behavior, and cheating.

### Design/Methodology

A total of 2158 workers (35.7% women), representing a wide range of professions, businesses, and private and public organizations, completed the measure for assessing the individual's dominant achievement goal, and the items that measured the strength of each achievement goal.

### Results

Most workers endorsed mastery-approach goals (41.1%), followed by mastery-avoidance goals (23.0%), performance-approach goals (13.7%), and performance-avoidance goals (9.4%). Workers with dominant achievement goals simultaneously hold other (multiple) achievement goals, but the strength of their own dominant achievement goal is higher relative to their other achievement goals.

### Limitations

The sample is somewhat skewed towards highly educated workers.

### Research/Practical Implications

The observed achievement goal profiles reconcile the single versus multiple achievement goal perspective. In concert with previous findings, the results suggest that practitioners should primarily focus on promoting mastery-approach goals in organizations because of their positive achievement goal profile and their favorable effects on job performance, interpersonal behavior, and ethical behavior. The undesirable social and ethical consequences of performance goals may caution practitioners against promoting these goals in the workplace.

### Originality/Value

We present unique data on the prevalence of achievement goals in the workplace, including the ideographic achievement goal profile associated with each dominant achievement goal.

## Ethical decision making in the face of failure

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### Purpose

This paper contributes to the field of behavioral ethics by examining a specific situation that can promote unethical behavior in business settings: a situation of escalating commitment. In particular, we assume that when being entrapped in a failing course of action decision makers do not only “throw good money after bad” but are also more vulnerable to unethical behavior.

### Design/Methodology

Overall, 161 subjects participated in a managerial decision-making experiment; we manipulated the personal responsibility for initiating a subsequently failing course of action. Subjects worked on a computer-based in-basket exercise that demands them to decide sequentially on multiple ethical and non-ethical scenarios.

### Results

The results suggest that being personally responsible for a failing course of action decreases moral awareness. Furthermore, moral awareness reduces the risk of unethical conduct, whereas goal commitment leads to a higher propensity of unethical behavior. Further results indicate that the probability to engage in unethical behavior increases as the decision maker gets more and more entrapped in a failing course of action.

### Limitations

Future research should further inspect the underlying psychological mechanisms responsible for increased unethical behavior within escalation situations.

### Research/Practical Implications

One possibility to prevent unethical behavior is suggested by the finding that moral awareness decreases the likelihood of unethical behavior. Thus, an organization should try to raise employees’ awareness of ethical considerations.

### Originality/Value

The present study reflects and validates the dynamic nature of ethical decision making and therefore extends previous work on ethical fading. Furthermore, our study provides first empirical insights into the determinants of unethical behavior in the face of failure.

## Out of control!? How loss of self-control influences prosocial behavior: The role of power and moral values.

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### Purpose

Self-control deficits cause decrements in prosocial behavior. Interestingly, research suggests that internalized moral values (i.e., moral identity) can buffer these effects. In the present research, we are the first to empirically test if moral identity (MI) can counter the negative effects of self-control deficits on prosocial behavior. We thus expect that self-control deficits cause people low in MI to act less prosocial, while there are no effects on people high in MI. Additionally, we focus on the role of power in this relationship. More specifically, because power facilitates internal states, we expect that power intensifies the interaction between self-control deficits and MI. In sum, we expect that for power holders, more than for powerless people, self-control deficits decrease prosocial behavior for people low in MI, but not for people high in MI.

**Design/Methodology**

We tested our predictions in two studies: An experimental study and a multisource field study (for generalization to an organizational setting).

**Results**

Two studies consistently showed that for people high in power, more than for powerless people, self-control depletion decreased prosocial behavior for people low in MI, but not for people high in MI.

**Limitations**

Measurement of MI instead of manipulation. We did this because research shows opposite results when manipulating MI.

**Research/Practical Implications**

The detrimental effects of self-control deficits on prosocial behavior can be countered by MI, thus showing the necessity to situationally induce MI.

**Originality/Value**

First empirical test of the buffering role of internalized moral values for the negative effects of self-control deficits on prosocial behavior and the role of power herein.

### **The de-escalation of commitment: Process accountability, biased information search, and time**

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**Purpose**

Escalation of commitment describes the continuation of a course of action in spite of drawbacks. To reduce the associated costs of escalation of commitment, de-escalation techniques are valuable. The present study investigates process accountability and the role of biased information search from a dynamic perspective.

**Design/Methodology**

A total of 93 participants were recruited for an “experiment on decision making” and randomly assigned to one of three experimental conditions manipulating choice and process accountability. In a computer-based decision scenario, subjects assumed the role of a manager in a chemical manufacturing company. The focal task was mentoring a trainee with severe performance problems. Subjects were told they would receive information on their trainee in the form of a personal diary and that at intervals they would have to decide on the future of their trainee by either keeping, dismissing, or transferring the trainee to another department of the company. Dismissing the trainee was considered as de-escalation. In addition, subjects' information search behavior was registered.

**Results**

Process accountability has a de-escalating effect, and bias in information search predicts escalation. More importantly, time plays a crucial role: Bias increases with time for highly committed decision-makers in particular. Whereas the (de-)escalatory effect of biased information processing is more important during earlier stages of the decision process, the (de-)escalatory effect of process accountability is stronger during later stages.

**Limitations**

This is a laboratory experiment with student subjects playing the role of decision makers.

**Research/Practical Implications**

The study demonstrates an important de-escalatory technique.

**Originality/Value**

It is one of the first studies that analyzes cognitive processes during de-escalation in a dynamic paradigm.



### **The effects of time perspective in an information-sharing task: Strategic choices and cooperation intentions**

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#### **Purpose**

Time perspective affects the way we view cooperation partners in social dilemma situations. Costs and benefits of cooperation present themselves differently if we anticipate cooperating short vs. long-term with the same partner. We extend existing research on time perspective and repeated interactions by investigating information sharing in a realistic scenario task and by using time frames of one week, several months and a whole year.

#### **Design/Methodology**

In two experimental studies (N1= 44, N2=118) participants imagined working in pairs for just one week (short time perspective), one term or again over a period of a year (long time perspective). They were confronted with scenarios of defective, cooperative and help-seeking behaviour of their partner in typical study task contexts.

#### **Results**

We found significantly more often tit-for-tat strategy choices if long-time collaboration was anticipated, but less willingness to help an inexperienced partner or step in for a defecting partner compared to short-term collaborations of one week. Overall, participants with a prosocial value orientation were more willing to help or compensate for a defecting partner, while those with a proself orientation were more likely to use tit-for-tat strategies or defect even if the partner was cooperative.

#### **Limitations**

Scenario design; student participants

#### **Research/Practical Implications**

Important implications for task framing: With a short-time perspective, participants focus on the task, with a long-time perspective on the work relationship, on norm-setting and fairness.

#### **Originality/Value**

To our knowledge the first study of time perspective in information-sharing and looking at helping behavior which is of high practical relevance.

### **Ease up after shocks: Critical events, person-environment fit, and organizational identification as dynamic predictors of work engagement**

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#### **Purpose**

The current study investigated the effects of negative critical events derived from the unfolding model of voluntary turnover (Lee & Mitchell, 1994) on work engagement. These so called "shocks" prompt deliberation about the current job, and are assumed to decrease motivation. Organizational identification was examined as a moderator of the shock-engagement relationship, because shocks might pose threats to identity. In addition, person-job (P-J) fit was examined as a previously overlooked potential antecedent of work engagement.

#### **Design/Methodology**

A three-wave longitudinal survey study across four months was conducted with employees from diverse industries (N = 187) to examine the short-term intraindividual effects of shocks and P-J fit. Organizational identification was studied as a time-invariant moderator. We applied hierarchical linear modeling (HLM) for repeated measures.

### Results

Analyses revealed that (1) experiencing shocks prompts decreases in work engagement, (2) higher P-J fit is associated with higher levels of work engagement, and (3) the negative effects of shocks are amplified by high levels of organizational identification. The pattern of results holds if general self-efficacy is accounted for.

### Limitations

Our investigation was restricted to self-reports.

### Research/Practical Implications

Overall, the results suggest that temporally dynamic aspects such as critical events and P-J fit deserve attention in the study of work engagement. The amplifying effect of organizational identification points to the negative side of a variable which has mostly been considered a resource so far.

### Originality/Value

This study combines and explores a set of dynamic predictors of work engagement that have been neglected so far.

## Staying engaged through job crafting: The role of job insecurity

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### Purpose

Organizational change could bring forth a state of high uncertainty and flux in the workplace, yet it could offer opportunities for employees to craft their own jobs. The present study aims to investigate how engaged employees conserve their own engagement through job crafting in an uncertain context (high job insecurity).

### Design/Methodology

424 employees' data from several companies were collected twice with a three-month interval. Structural equation modeling and moderated multiple regression were used to test our hypothesis.

### Results

Baseline work engagement predicted future work engagement that resulted from an increase in both physical and relational job crafting. The positive relationship between baseline work engagement and the increase in relational job crafting was stronger when job insecurity was high.

### Limitations

The cross-cultural generalizability of the findings needs to be examined by further studies in other cultures. Second, future studies can also explore how individual difference variables (e.g. fatalism, power distance) influence the process of job crafting.

### Research/Practical Implications

We conclude that engaged employees could craft their own work in both physical and relational way in order to keep them staying engaged. Moreover, under a context of high job insecurity, engaged employees are inclined to expand more relational aspect of the job, which corroborates previous findings that Chinese people are more likely to place strong emphasis on good relationships in the workplace particularly when they feel their jobs are insecure.

### Originality/Value

To the best of our knowledge, this is the first Chinese study investigating the underlying job crafting process whereby individuals protect and maintain their engagement during a high uncertain context.

## The ownership paradox: Idea ownership may hinder radical creativity

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### Purpose

In contrast to the perspective that experiencing psychological ownership of ideas primarily has positive effects on individual creativity (e.g., increased responsibility, stronger commitment toward ideas), the present study addresses potential threats that are associated with strong feelings of idea ownership. More specifically, we hypothesized that idea ownership will weaken the relationship between creative self-efficacy and radical (versus incremental) creativity. It is our contention that people who feel very confident about their own creative skills and who experience high levels of psychological idea ownership behave more protective toward their own ideas, which leads to less external input and thus, less radical innovation (i.e., compared to low levels of idea ownership).

### Design/Methodology

A longitudinal survey design was used with 13 measurement waves comprising a six month-period. Repeated measures data was obtained from 35 students in industrial product design, which engaged in a prototype development assignment based on a real-life case.

### Results

Within-person analyses were conducted with HLM and supported our hypothesis.

### Limitations

Self-ratings were used to measure the dependent variable (i.e., type of creativity). However, in order to reduce common method variance, the outcome variable was measured at the subsequent wave (i.e., cross-lagged design).

### Research/Practical Implications

Findings from this study imply that psychological ownership of ideas should not be encouraged within organizations that wish to stimulate radical creativity as it diminishes the positive effect of creative self-efficacy.

### Originality/Value

The present study approaches psychological idea ownership as an impeding factor for radical creativity whereas previous research has mainly focused on the beneficial effects of psychological ownership perceptions.

## To be fully there: Linking psychological safety and authentic expression to work engagement

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### State of the Art

Perspectives on leadership I and II present empirical studies applying different methods, an experimental study and a metaanalysis from the area of leadership research. Both symposia include international contributions and an intervention study providing interesting implications for practitioners. Perspectives on leadership I focuses on the relationship between leadership and different outcomes like effectiveness and wellbeing. Diversity is addressed as an important challenge in the light of demographic change.

### New Perspective/Contribution

The first study by Knoll et al. focuses on the positive effect of shared leadership on team effectiveness and investigates whether this effect depends on follower silence. Jungbauer et al. present an experimental study assessing visionary leadership as a buffer against negative effects of team crises on team performance. The third study by Bilinska et al. ad-

addresses the consequences of younger leader-older subordinate dyads for the wellbeing of these subordinates. Age-differentiated leadership is presented as a potential remedy against negative effects on elder subordinates' wellbeing. Finally, Rigotti et al. present an evaluation study of a training program on health-promoting leadership including data on both formative and summative evaluation. 11 teams and their leaders took part in this program over a time span of 16 months. Christine Gockel will integrate the different contributions as a discussant.

#### Conclusion and Implications for Research/Practice

The contributions in this symposium extend existing research and point out new directions for leadership research. Practical implications include suggestions how leadership effectiveness and wellbeing in organizations can be enhanced. Diversity issues are discussed and an innovative training program is presented.

### The social network correlates of innovation: A meta-analysis

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#### Purpose

Recent history has seen a surge of inquiries into the link between individuals' social networks and innovation. These studies have examined a variety of both structural and relation features of networks, such as constraint, centrality, diversity, network size, weak/strong ties, etc. Although previous research has made great strides toward illuminating the social forces impacting innovation, there are at least two problems associated with this literature. First, there are conflicting findings surrounding most of the social network features that have been considered. For example, while some investigations have pro-

duced evidence suggesting that structural holes seem to be conducive to innovation, others have provided evidence to the contrary suggesting that closure may enhance innovation. Second, from this previous work it is not clear whether structural or relational features are stronger predictors of innovation and which features seem to be most potent overall in driving this outcome.

#### Design/Methodology

To address these questions, we conducted a meta-analysis of more than 50 studies across multiple disciplines.

#### Results

Results indicated that structural features, such as centrality and lack of constraint seem to trump the effects of relation features, such as strong ties.

#### Limitations

It remains to be seen whether the observed effects are homologous across levels of analysis.

#### Research/Practical Implications

Our results underscore the importance of structural network features in enhancing innovation and identify its most potent drivers.

#### Originality/Value

Our study is the first attempt to use meta-analysis to systematically analyze the burgeoning literature on the social network correlates of innovation.

### Individual-level effects of team boundary spanning activities

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#### Purpose

Teams working on innovative tasks usually need to interact with individuals, teams, departments or even other companies in order

to achieve their tasks as certain knowledge and information lies outside of their teams' boundaries. Therefore, team members often engage in boundary spanning activities, such as coordinating, scouting and representing. Prior studies have shown that these activities influence the performance of such innovation teams, but so far haven't looked at individual-level outcomes of boundary spanning activities. Consequently, we hypothesized that team boundary spanning impacts on the team member's learning, network expansion and perceived status.

#### Design/Methodology

We collected data from 70 teams working in inter-company innovation projects and included data from both, team members and team leaders, in our analysis. The sample mainly focused on the engineering industry in German-speaking Europe.

#### Results

We used hierarchical linear modeling (HLM) to test our cross-level hypotheses. Not all of our hypotheses were supported as the impact on the individual depends highly on the type of boundary spanning activity.

#### Limitations

The cross-sectional design of the study does not allow full inferences about the causality of the relationships. Moreover, the generalizability of our findings might be restricted by region and industry.

#### Research/Practical Implications

The results underline the importance of the team-level context for individual-level outcomes and show that team members might benefit from particular team activities and that innovation teams need to be managed carefully.

#### Originality/Value

As far as we are aware, the study is the first that looks at cross-level effects of different

team boundary spanning activities on individual-level outcomes variables.

### **The effects of trained 2x2 achievement goals on motivation after feedback**

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#### Purpose

Employee feedback is very essential for organization's success. However, the effects of feedback on motivation and performance are very complex (Kluger & DeNisi, 1996). Achievement goal orientation theory (Dweck & Leggett, 1988) suggests that the type of goals individuals strive for creates a framework for how people respond to feedback, based on the different motives people have when evaluating feedback (Alicke & Sedikes, 2009; Elliot & Mapes, 2005). We therefore propose that feedback affects motivation depending on whether an individual sets learning-approach (self-improvement motive), learning-avoidance (self-assessment motive), performance-approach (self-enhancement motive), or performance-avoidance (self-protection motive) goals.

#### Design/Methodology

To test the effects of feedback valence and achievement goals on motivation, 160 students were trained to set one of the four achievement goals for an upcoming complex task (Van Hooft & Noordzij, 2009). After performing the task, participants were provided with positive or negative feedback followed by a free-choice task continuation period.

#### Results

Results demonstrated that task continuation was shorter after positive compared to negative feedback and shorter for performance-approach and performance-avoidance goals

compared to learning-approach and learning-avoidance goals. No significant interaction effect occurred between achievement goals and feedback. However, a significant linear trend was found: learning-approach goals combined with negative feedback resulted in the longest task continuation, while performance-avoidance goals combined with positive feedback resulted in shortest task continuation.

Limitations; Research/Practical Implications; Originality/Value

To our knowledge, this study is the first examining the interplay of situational 4x4 achievement goals and feedback on motivation. Given the exploratory nature of the study, future research should test the hypotheses that can be derived from the study.

### **The interaction effect of implicit goals and explicit feedback on performance**

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#### **Purpose**

In two laboratory experiments, we investigated the combined effects of negative feedback (a common occurrence in the work context, when performance goals are set in line with goal-setting theory) and subconscious achievement goals on performance.

#### **Design/Methodology**

In Experiment 1 (n=80), we manipulated negative feedback (no vs. negative feedback with reference to personal goal). Additional information about the average performance of a comparison group (indicating average vs. below-average performance) was provided in Experiment 2 (n=90). A resource-intensive concentration-and-attention task was used. Priming occurred through a scrambled-sentences task.

#### **Results**

Experiment 1 results showed that primed achievement goals influenced performance positively when participants received no feedback about prior performance. However, with negative feedback, participants pursuing implicit achievement goals performed worse than non-primed participants. Such an interaction effect was also visible in task-specific self-efficacy. The interaction effect on performance was fully mediated by changes in self-efficacy.

Experiment 2 revealed that a negative effect of negative feedback combined with priming was prevented by providing additional comparison information. Especially when feedback was negative for both personal goal progress and comparison, priming resulted in higher performance than no priming. Results point to persistence as an additional explanatory variable.

#### **Limitations**

Generalization of these results may be limited by the type of task and priming method used.

#### **Research/Practical Implications**

In negative feedback environments, the presence of subconscious achievement goals may reduce performance. Additional normative information may, however, buffer against performance declines.

#### **Originality/Value**

To our knowledge, these experiments constitute the first attempt to establish the combined effects of subconscious goals and negative feedback on task performance.



## The motivational effect of feedback from others

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### Purpose

The purpose of this study is to investigate the motivational effect of feedback from others. This study focuses on the motivational effect of feedback seeking behaviors and relationship with superiors.

In addition, This study pays attention to interactional effect of feedback seeking behaviors and relationship with superiors.

### Design/Methodology

The questionnaire research was conducted for the 184 nurses working in the Japanese hospital. Using these quantitative data, multiple regression analysis was conducted.

### Results

Results showed that relationship between superiors and subordinates (affective) had a statistically significant direct impact on employees' internal motivation. Likewise interaction effect between feedback seeking behaviors and relationship between superiors and subordinates (professional) were also found to have significant effect on internal motivation.

### Limitations

The survey respondents were employees in a Japanese hospital. We must conduct research with other sample populations to confirm the generalizability of our results.

### Research/Practical Implications

This result means that the motivational effect of feedback from others much more complex than expected. To motivate themselves, employees should not only seek the feedback from the others but also make the good relationship with superiors.

### Originality/Value

First, this study investigated the motivational effect of feedback from others. Especially, the motivational effect of feedback seeking behaviors and the interactional effect of these behaviors and relationship with superiors were never investigated. Second, this study developed the original measures of feedback seeking behaviors in Japanese.

## A closer look at the reluctance to seek feedback: The role of interpersonal uncertainty and power

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### Purpose

Individuals are often reluctant to seek valuable performance feedback. Prior research primarily focused on feedback seeking antecedents related toward the feedback itself (e.g., feedback valence or its informative value) and largely neglected the interpersonal aspects of feedback seeking. To fill this void, we focus on uncertainty experienced in interpersonal situations as a potential determinant of feedback seeking. We argue that individuals with higher interpersonal uncertainty are less likely to seek feedback. Moreover, we posit that this effect is especially strong for powerful (vs. powerless) individuals because they are particularly focused on ego-protection and less on image-enhancement when experiencing interpersonal uncertainty.

### Design/Methodology

We tested our hypotheses in one cross-sectional field study (N= 99) and two online experiments (N1= 267 & N2 = 210).

### Results

As anticipated, we found that through a stronger ego-protection and weaker image-enhancement motivation individuals seek less feedback when they experience high interpersonal uncertainty, particularly when they feel powerful.

### Limitations

The cross-sectional field study may raise concerns regarding causal inferences and the online experiments regarding external validity. The complementary nature of the designs addresses these concerns.

### Research/Practical Implications

Our results suggest that effective feedback seeking in organizations can be enhanced by reducing interpersonal uncertainty (e.g., through interpersonal skill trainings or team building), particularly among powerful supervisors.

### Originality/Value

We show that important insights on feedback seeking can be gleaned by attending to the interpersonal aspects of feedback seeking. In addition, we confirm the influence of ego- and image-related motives, which are assumed to underlie feedback seeking but have been rarely empirically tested. Last, unlike prior research, we are concerned with top-down feedback seeking.

## **When do employees benefit from diverse feedback? A motivated information processing account of feedback seeking and creativity**

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### Purpose

Although feedback from diverse sources can increase creativity (De Stobbeleir, Ashford, &

Buyens, 2011), diverse feedback can be quite inconsistent and generate serious information processing challenges (Zhou, 2008). Drawing on motivated information processing theory, we develop and test a model investigating the boundary conditions under which feedback from diverse sources leads to creativity. We hypothesize a three-way interaction, so that feedback from diverse sources will only lead to higher creativity when both an individual's epistemic and social motivation are high.

### Design/Methodology

We tested our model in a sample of 223 nurses working in Belgium. Feedback diversity was measured using social network methodology. Self-ratings were obtained for all independent variables. Supervisors provided ratings of nurses' creativity.

### Results

The results showed that nurses achieved the highest creativity when they received feedback from diverse sources, epistemic motivation was high (low creative time pressure) and social motivation was high (high charismatic leadership style of head nurse or high other-orientation of nurse), thus confirming the hypothesized three-way interaction.

### Limitations

It remains to be tested how much our results generalize to other occupational groups than nurses.

### Research/Practical Implications

Our results take a step in informing researchers of the cognitive and social processes that allow employees to benefit from feedback-seeking behavior.

### Originality/Value

To our knowledge, this study is the first that applied a motivated information processing perspective to feedback-seeking behavior. We also introduced a novel methodological ap-

proach for studying feedback seeking (i.e., social network measures).

### **Job conditions and employee retention intention – which conditions count and how are the relations mediated**

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#### **Purpose**

It is increasingly difficult to acquire qualified employees for certain jobs in many European countries. To handle these difficulties retention management activities are introduced in many enterprises, though the corresponding measures and strategies are rather based on unsystematic experiences. To plan effective retention management strategies, it is crucial to systematically know which conditions are able to influence the retention intention.

Based on a review of existing retention management studies we first identified and classified retention relevant job conditions (e.g. organizational climate, leadership behavior, task conditions, remuneration conditions). Furthermore we referred to models and studies of work satisfaction, psychological contract, experienced organizational support, and organizational commitment to model different mediating processes between the relevant job conditions and the retention intention.

#### **Design/Methodology**

Based on this model of retention relevant influence variables we derived several hypotheses which were examined in a questionnaire based survey of employees (N=383) in different service oriented organizations. The assumed model relations were examined in different regression and path analyses.

#### **Results**

Results show that the relevant job conditions were differentially related to retention intention dependent on the type of service organi-

zation and different career stages of the employees. The relations between job conditions and retention intention were also mediated by organizational commitment, fulfillment of psychological contract and the experienced organizational support.

#### **Limitations**

The survey data are not raised in a longitudinal design.

#### **Research/Practical Implications**

Results show to which job conditions and mediating variables effective retention strategies should refer to.

#### **Originality/Value**

The study is one of a few studies to systematically analyze a complex mediation model of retention relevant job conditions and retention intention.

### **Psychological contract evaluation: Why breach does not equal reversed fulfillment**

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#### **Purpose**

The common practice of interchanging psychological contract (PC) breach and fulfillment confounds two distinct constructs. Culminating in the meta-analysis on PC breach (Zhao et al., 2007), many studies combine fulfillment evaluation with broken promises (e.g. Robinson & Morrison, 2000), reversing fulfillment and call it breach (e.g. Raja et al., 2004) or vice versa (Henderson et al., 2008). But findings hint towards distinct magnitudes between both constructs with e.g. affective commitment (Ng et al., 2010; Sturges et al., 2005). By means of three outcomes, we demonstrate that the mere reversion of signs does not turn breach into fulfillment or vice versa.

**Design/Methodology**

Paper-pencil surveys were filled in by 375 volunteers attending a national church congress in Germany. Based on the PC Inventory (Rousseau, 2000), comparable breach and fulfillment scales were designed. Reliabilities, including job satisfaction (Iwanowa, 2007) and irritation (Mohr et al., 2006), exceeded  $\alpha = .80$ . Work hours were measured continuously.

**Results**

Fulfillment and breach correlate only moderately ( $r = -.43^{**}$ ). Regression analyses show stronger relationships of fulfillment with job satisfaction, and of breach with irritation. Only breach was significantly associated with weekly work hours. Polynomial surface response graphs underline the distinct patterns.

**Limitations**

Despite a cross-sectional design, reliabilities and statistical methods speak for valid findings.

**Research/Practical Implications**

We recommend distinct use and interpretation of breach and fulfillment, as their meaning deviates. Fulfillment may be stronger associated with positively connoted outcomes, while negatively connoted outcomes may correlate higher with breach.

**Originality/Value**

This distinction of fulfillment and breach is not yet convincingly addressed, and some PC studies may deserve new interpretation.

**The good and the bad explain the ugly:  
Not only ideal but also counter-ideal person-organization value fit explain turnover intentions and counterproductive work behaviors**

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**Purpose**

The idea that besides a fit of ideal values a fit of counter-ideal values matters as a second point of reference to individuals has emerged only recently. However, this idea has never been explored with regard to person-organization fit. With the present study, we investigate the effects of both types of value fit. In particular, we look at the consequences for negative work outcomes, but also examine potential mediators.

**Design/Methodology**

We conducted a time-lagged survey with more than 700 employees from different industries. Data were analyzed via polynomial regression and surface response analyses.

**Results**

We find support for our hypotheses in that 1) value fit matters for turnover intentions and counterproductive work behaviors, 2) this is true for ideal and counter-ideal values, 3) ideal and counter-ideal values function to some degree independently, and 4) workplace satisfaction as well as emotional exhaustion mediate the relationships.

**Limitations**

The mediation leaves room for other potential driving factors. Additionally, not all value types within the ideal and counter-ideal value systems exhibit the same effect. Both issues should be explored in the future.

**Research/Practical Implications**

Research would be well advised to extend current value frameworks to include a second counter-ideal value system. If organizations care for a good fit between them and their employees (and there are various reasons why they should), they should start formulating what they do not stand for.

**Originality/Value**

This is the first study to examine the novel notion of counter-ideal values in the domain of person-organization fit.

**The mediating role of need satisfaction in the relationship between psychological contract breach and positive/negative affect: A daily-diary study in a sample of volunteers**

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**Purpose**

Previous studies showed that psychological contract breach—the perception that certain obligations were not met by the organization—elicits a negative emotional response (i.e., violation). Building on the self-determination theory, we hypothesize that this relationship between breach and violation is mediated by the degree to which needs are satisfied. Moreover, based on the broaden-and-build theory of emotions, we posit that both positive and negative emotions need to be considered as elements of violation, as opposed to merely negative emotions in prior studies.

**Design/Methodology**

Fifty volunteers completed a daily-diary study for 10 consecutive days in which they volunteered (N=272). We used multilevel mediation analysis to test our hypotheses.

**Results**

Results confirmed that need satisfaction mediated the relationship between breach on the one hand and positive and negative affect on the other hand. In particular, respondents who experienced breach reported a decrease in positive emotions, because their need for autonomy and their need for relatedness be-

came less satisfied. Respondents who experienced breach also reported an increase in negative emotions, because their need for relatedness was less satisfied.

**Limitations**

Respondents stemmed from a single organization, which may limit the generalizability of our findings.

**Research/Practical Implications**

Our study illustrates that breach elicits an emotional response because people perceive that breach thwarts the satisfaction of certain needs. We demonstrate that the concept of violation needs to be broadened, as distinct reactions in terms of positive and negative emotions need to be taken into account.

**Originality/Value**

This paper contributes to the literature by investigating within-person processes as opposed to between-person differences in reactions to breach.

**Felt accountability as a constraint to workplace deviance: Mitigating the adverse effects of psychological contract breach**

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**Purpose**

This study focused on felt accountability's capacity to constrain misbehavior at work. We followed Robinson and Bennett's (1997) general model of workplace deviance and investigated felt accountability's attenuating effects on the relationship between psychological contract breach – an established driver of misconduct – and organization-directed as well as interpersonal deviance.

**Design / Methodology**

We conducted a field study with two measurement points (t1: psychological contract

breach and felt accountability; t2: interpersonal and organization-directed deviance) and N = 185 matched pairs of self- and coworker-reports on workplace deviance.

#### Results

Our findings supported felt accountability's capacity to constrain workplace deviance: In the face of high levels of psychological contract breach, employees high in felt accountability showed less workplace deviance as compared to those low in felt accountability.

#### Limitations

Although captured at different points in time (to reduce common method bias), all measures similarly elicited retrospective responses. In order to infer causality with greater confidence, a longitudinal research design is needed with current psychological contract breach and felt accountability measured several months before workplace deviance is surveyed.

#### Research/Practical Implications

Our findings support the often conveyed idea of boosting accountability to foster ethical conduct at the workplace.

#### Originality/Value

Research on the effects of felt accountability has by and large focused on desired behavior (namely task performance and citizenship behavior), while its relationship with undesired behavior and, more specifically, its capacity to restrain wrongdoing at the workplace has remained largely unexplored. This study contributes to closing the gap.

### **The moderating role of perceived organizational support on the relationship between psychological contract fulfilment and work attitudes and behaviours**

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#### Purpose

Drawing on the concept of psychological contract as a framework for the exploration of the tacit understandings of employees' exchange relationship, the purpose of this research is to examine Greek employees' perceptions of psychological contract content and breach in a period of the current economic crisis.

#### Design/Methodology

Using a qualitative research design, twenty interviews were conducted with employees working in both the public and private sector. In the course of the interviews, participants were also asked to report critical incidents regarding particular incidents that they thought their employer had failed to fulfill an obligation towards them.

#### Results

The analysis indicated categories of incidents more likely to lead to perceptions of psychological contract breach. While changes were detected regarding the notion of 'job security' and 'career advancement', the study findings in regard to psychological contract content bear much similarity to previous empirical research. Moreover, as compared to recently-tenured employees, differences were detected in the sense making processes of more experienced employees.

#### Limitations

The findings of the present research may constitute the basis of future research which could focus on the new boundaries and content of the revised contract using a larger and more representative sample of employees.

#### Research/Practical Implications

Management could benefit from taking into account what employees expect to give and receive in their working relationship with the employer and therefore minimizing possibilities of contract breach.



**Originality/Value**

The study examines the concept of psychological contract as a sense making process in a sample of greek employees in a period of economic crisis, increasing unemployment and changing employment relationships.

### **And justice for the team: Linking justice climate and team performance through team commitment**

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**Purpose**

Most of the organizational justice research has focused at an individual level. However, everyday more and more organizations rely on teams to accomplish organizational goals. In order to accomplish organizational goals, it is important to count with healthy, motivated and committed employees. But in order to have a healthy, it is crucial to have a work environment that fosters psychosocial wellbeing. Based on the Healthy and Resilient Organizations Model (Salanova et al., in press), we hypothesized that affective commitment will partially mediate the relationship between justice climate (distributive and interpersonal) and team performance (in-role and extra role).

**Design/Methodology**

We conducted a cross-sectional using aggregated data from 586 employees, nested in 149 teams, from 44 organizations in Spain. We tested our hypothesis using Partial Least Squares Structural Equations with PLS-Graph.

**Results**

Our results provide full support for our hypothesis. That is, when teams perceive are treated in a fair manner, and with respect and dignity, teams would not only perform better,

but also tend to feel more committed to the organization.

**Limitations**

Some limitations of this study are: use of a convenience sample, cross-sectional data and all data was provided by the same source.

**Research/Practical Implications**

These are promising results for the study and development of healthy work places. We provide empirical support to the HERO Model. Also, we provide evidence of how can we foster better performance through team commitment.

**Originality/Value**

To our knowledge this is the first study of organizational justice, commitment and performance conducted at a team level in Spain.

### **Personality traits and vocational specialty: An examination of the Big Five and Medical Specialty Choice**

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**Purpose**

We develop and test a theoretical model proposing how the Big Five are associated with vocational behaviour around specialty choice once a person has entered an occupation or job.

**Design/Methodology**

Participants were 199 junior doctors working for the UK NHS (64% female, 36% male; mean age = 31).

Personality was measured using the 240-item NEO Personality Inventory (Revised; NEO PI-R; Costa & McCrae, 1992).

Participants stated their chosen medical speciality as part of an online questionnaire, which was assigned Holland RIASEC occupa-

tion scores following procedures described by Woods and Hampson (2010) using the O\*NET database (O\*NET Resource Center, 2003).

#### Results

Agreeableness was positively associated with the Social dimension of the RIASEC model, reflecting interpersonal and social aspects of this trait. Agreeableness was also negatively associated with the Artistic and Conventional RIASEC dimensions.

Neuroticism was negatively associated with the Realistic and Enterprising dimensions, and positively associated with the Artistic dimension, reflecting approach/avoidance tendencies associated with this trait.

#### Limitations

Our study is conducted in a homogeneous sample and we are unable to report longitudinal or prospective associations from our data.

#### Research/Practical Implications

The traits associated with occupational interests may be different from those that guide specialty choice within occupations. We identify conditions that might determine how and when personality traits are related to specialty choice, and explain how Neuroticism and Agreeableness are associated with vocational behavior. Our findings have implications for career/vocational guidance, and job profiling.

#### Originality/Value

Our study contributes a new perspective on how personality influences career behaviour, and helps to clarify understanding about how different traits might shape people's careers once they have selected an occupation.

### Constructing career identity

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#### Purpose

Career identity is an essential factor in securing stable employment, a key driver of employability, and an important predictor of job search and obtaining reemployment. Unfortunately, people's career identity declines during unemployment. Yet, our knowledge about the reversed process in which a (new) career identity is constructed is scarce. This study took an inductive and qualitative approach to investigate why and how career identity is constructed among unemployed people.

#### Design/Methodology

I used a purposive sample of 29 unemployed young adults who lack a clear career identity. Participants followed a reemployment program ("Jamie Oliver's Fifteen"), in which they were trained to become professional chefs. Interview data was analyzed using Nvivo and complemented with quantitative data on participants' employment status one year later.

#### Results

The interview data revealed two main findings. First, most participants did not make a conscious decision to participate in the program by reflecting upon their goals or possibilities, which contradicts employability and reemployment research. Second, participants experienced a stronger sense of career identity as the program proceeded. They constructed career identities by discovering new competences, role models, and actively distinguishing themselves from the unemployed identity.

#### Limitations

Qualitative data does not provide conclusions on the effectiveness of different career identity construction strategies.

#### Research/Practical Implications

The findings add to the literature of identity formation by underlining the crucial role of social context and the lack of planned, goal-

directed behavior when constructing career identity.

#### Originality/Value

This study is the first to take a bottom-up approach in investigating young people's career identity construction as they attempt to find reemployment.

### **Cognitive loafing in work groups: When employees would rather not think**

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#### Purpose

Tasks requiring collaboration lead to cognitive interdependence and a transactive memory system in teams (Wegner, 1995). Team members depend on each other to contribute their share to a common task. For knowledge-intensive tasks, team members are required to contribute knowledge and expertise. The term cognitive loafing was first coined by Weldon and Gargano (1985) to describe reduced cognitive effort when individual contributions are not clearly identifiable. To apply this concept to organizations, we developed an instrument to assess cognitive loafing in teams. We predicted that transactive memory is negatively impacted by cognitive loafing but positively impacted by affective commitment. Furthermore, we predicted that cognitive loafing within a team will not be contagious for team members who are highly emotionally committed to their team.

#### Design/Methodology

One hundred fifty four employees with full-time or part-time employment completed a questionnaire assessing the constructs cognitive loafing (self), perceived cognitive loafing (in others), transactive memory, and affective commitment.

#### Results

Results of regression analyses supported all hypotheses.

#### Limitations

Our data are cross-sectional and do not allow assumptions about cause-effect relationships. Further studies have to include longitudinal samples.

#### Research/Practical Implications

Our results imply that a better understanding of cognitive loafing is imperative for teams and organizations.

#### Originality/Value

The concept of cognitive loafing has not yet been applied to organizations. We present the usefulness of an instrument that assesses an observable and common phenomenon in the team context.

### **Organizational values and identification: The relationship of perceived organizational values with cognitive and affective identification**

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#### Purpose

The aim of this study was to examine the impact of perceived organizational value systems on cognitive and affective organizational identification. Organizational value systems constitute a set of core attributes of the organization, and therefore can be considered as a manifestation of organization's identity. The competing values model proposes that organizational values reflect four main value orientations, namely, support, goal, innovation, and rules. This study set out to investigate how cognitive and affective identification is influenced by the organizational value orientations suggested by the competing values framework. Higher cognitive identification was expected to be related with perceived support and innovation value orientations. Affective

identification was anticipated to be positively related with perceived goal, support and innovation value orientations and negatively related with rules orientation.

#### Design/Methodology

One hundred and seventy two employees working in organizations in the public and private sector, such as schools, hospitals, and banks, filled in a battery of questionnaire measures of organizational identification and support, innovation, goal, and rules value orientations.

#### Results

To test for the hypotheses moderated hierarchical regression analyses were carried out using cognitive or affective identification as the criterion variable. The findings showed that support and innovation value orientations predicted cognitive identification, whereas goal value orientation had an impact on affective identification.

#### Limitations

A limitation of this study was the cross sectional nature of the data.

#### Research/Practical Implications

On a practical level, organizations may benefit by making usage of different strategies to promote cognitive and affective identification.

#### Originality/Value

These findings indicate that perceived organizational values are basic elements of self engaging processes in organizational contexts.

### **Does trust matter more in virtual teams? A meta-analysis on virtuality as moderator of the relationship between trust and team performance**

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#### Purpose

Recent meta-analyses have revealed that trust is positively related with performance in teams. However, these analyses focused predominantly on teams with high degree of face-to-face interaction. For virtual teams, the relation between trust and performance is less clear. Although virtual team might require higher trust due to reduced control and process feedback, electronic communication in virtual teams often provides particularly high process documentation that might reduce the need for trust. In this meta-analysis, we explore trust and performance in teams considering degrees of virtuality and process documentation as central moderator variables.

#### Design/Methodology

We conducted a multilevel meta-analysis with 130 effect sizes reported in 58 published studies. Levels of virtuality and process documentation were coded as moderator variables in a mixed-effects model.

#### Results

Overall, trust is positively related to team performance, consistent with earlier meta-analytical reviews. However, this correlation is significantly reduced in virtual teams. Further moderation analyses suggest that process documentation mediates this moderation effect, consistent with our expectations.

#### Limitations

Although longitudinal studies are considered, most of the included research is cross-sectional and thus does not permit causal inferences.

#### Research/Practical Implications

Future research needs to be done on experimental and longitudinal designs to explore trust effects at different stages of team work, considering both the relative degrees of virtuality and process documentation as moderator conditions.

**Originality/Value**

The study extends existing research by investigating the moderating effect of virtuality on the relationship between trust and team performance in a meta-analytical design. The results challenge the popular assumption that trust is more important in virtual as compared to face-to-face teams.

**Intra-organizational trust as an organizing principle: The case of a works council implementation**

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**Purpose**

This paper investigates the coup-d'état-like implementation of a works council in a German non-profit organization through an in-depth case study. We focused on intra-organizational trust as a promising promising concept to explain the reciprocal interaction of agents and structure that we observed.

**Design/Methodology**

Adopting an inductive grounded-theory approach we conducted 14 in-depth interviews with employees and managers (including the CEO), observed a staff meeting and analyzed an organization-wide employee survey.

**Results**

We found that the implementation consisted of two phases in each of which an undesirable state was left unaddressed (i.e. a lack of legitimacy) by either the management or the staff representation and thereby deteriorated trust and compelled a number of people to take collective action to address the situation. Eventually, a minority supported by a union enforced a works council and thereby

overthrew the former volunteer-based staff representation in a "coup d'état." The link between lack of legitimacy, deteriorating trust and collective action changing organizational structure was embedded in the literature and yielded a new and rare theory of the reciprocal interaction of agents and structure.

**Limitations**

The findings are limited to the investigated organization and need to be verified in other contexts.

**Research/Practical Implications**

Future research should examine trust during institutional entrepreneurship. Practitioners should legitimize outcomes if they want to preserve organizational structure.

**Originality/Value**

The classical model of organizational trust by Mayer et al. (1995) is reconciled with the fundamental dimensions of social perception in psychology as well as the institutional work and trust repair literature. This yields an innovative conceptualization of trust as a link between agency and structure.

**Motivation for trust behaviours at work: A longitudinal field study**

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**Purpose and Originality**

Combining motivation and trust theory, this paper represents the first longitudinal study of the motivational processes underlying trust behaviour. Although the concept of motivation to trust was introduced by Williams (2001), this paper draws on self-determination theory (Deci & Ryan, 1985) to conduct the first empirical investigation of the concept. Specifically, we propose that reliance on and disclosure to co-workers is influenced by trust motivation driven by need satisfaction within

working relationships. Additionally, we investigate the impact of chronic regulatory focus (Higgins, 1997) on motivation to trust. We hypothesise that a promotion orientation, and focus on growth, will increase initial levels of trust motivation. In contrast, individuals with a prevention orientation, and focus on security, are expected to show lower initial motivation to trust.

#### Methodology

Our hypotheses are tested using a sample of 193 employees of a large accounting firm. Data was collected in four waves, beginning at relationship initiation and continuing until colleagues had worked together for three months. The proposed model was tested in MPlus using a non-linear latent growth model.

#### Results

Results suggest that regulatory focus is related to initial motivation to trust in the hypothesised manner and that change in motivation to trust over time impacts employee willingness to engage in reliance ( $\beta = .69$ ,  $p < .001$ ) and disclosure ( $\beta = .51$ ,  $p < .001$ ) behaviours.

#### Research Implications

This paper incorporates well-established motivation theory into the study of trust, and provides a unique insight into the active role individuals play in developing interpersonal workplace relationships.

### **The mediating effect of trust in supervisor on the hope–employee task performance and hope–individual organizational citizenship behavior relationships**

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#### Purpose

Despite an important amount of theoretical and empirical attention, the processes that mediate the hope-task performance and hope-Individual Organizational Citizenship

Behavior (OCBI) relationships remain poorly understood. Building on the Social Exchange Theory (SET) of Blau (1964), I hypothesized that subordinates' trust in their direct supervisors fully mediates the hope-task performance and hope-OCBI relationships.

#### Design/Methodology

A stratified random sampling strategy was used to collect data from 39 departments of an industrial organization to test the two hypotheses. The sample consisted of 300 subordinates and their 138 immediate supervisors. Data on independent, mediating, and dependent variables were collected through three different survey questionnaires in different times (t1, t2, and t3 with three-week time intervals) and from different sources to control common methods variance. Comparison of alternative measurement models proved that 4-factor model gave a good fit to the data.

#### Results

Hierarchical linear regression results supported the two hypotheses and follow-up Sobel tests of significance of the mediation confirmed the results.

#### Limitations

The study is cross-sectional that makes comments considering causality as speculative. It is possible that OCBI, for example, influences hope.

#### Research/Practical Implications

These results imply that managers should increase employees' trust in their direct supervisors if they want to benefit from the effect of hope on employee task performance and OCBI.

#### Originality/Value

To the best of my knowledge, this study is the first to examine the mediating processes (e.g., 'employees' trust in their direct supervisors' in



this study) in the hope-task performance and hope-OCBI relationships.

### **Gender and cultural differences in leaders' perceptions of being fairly rewarded for their work and their impact on subordinates' job attitudes and health**

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#### **Purpose**

According to equity theory, employees perceive distributive justice if efforts and rewards match. Studies so far primarily focused on distributing material benefits in the work context as promotions, and looked for cultural differences on the individualism-collectivism dimension. We assume that it is worthwhile to consider also other cultural dimensions as masculinity-femininity, and to take into account that besides material also symbolic benefits such as appreciation can be allocated.

#### **Design/Methodology**

In a cross-cultural study we asked male and female leaders from Germany, Finland and Sweden if they perceived that (a) the salary they got corresponded to the work they had completed (material benefit), and if (b) the appreciation they received was appropriate for the work they had performed (symbolic benefit). These supervisor data (level 2) were matched with data on job attitudes (e.g., commitment) and mental health (e.g., exhaustion) of the leaders' subordinates (level 1).

#### **Results**

We found that the impact of leaders' distributive justice perceptions on subordinates' job attitudes and mental health differed according to culture, gender and type of benefit.

#### **Limitations**

This study was done in a female-dominated sector which might question the representativeness of the data.

#### **Research/Practical Implications**

If leaders evaluate that their work is fairly rewarded also the health of their subordinates improves indicating a fruitful starting point for workplace interventions.

#### **Originality/Value**

Due to increasing gender and cultural diversity at the workplace exploring how distributive justice perceptions work for male vs. female leaders in masculine vs. feminine cultures help to prevent turnover and worker dissatisfaction.

### **Virtually trustworthy: Using nonverbal mimicry to establish trust and belongingness over webcam**

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In the new world of communication, people must learn to effectively communicate over digital media. However, it is not entirely clear how and whether digital communication (e.g., via webcam) differs from face-to-face interactions. In this study, we present behavioral mimicry as a social cue for webcam interactions. Behavioral mimicry has shown to be an important factor in our everyday life interactions (Chartrand & Bargh, 2009), and may also be a cue to fulfilling one's fundamental belongingness needs (Baumeister & Leary, 1995). But how do the effects of such a primitive behavior as mimicry convey over a webcam? To test this question, we experimentally manipulated whether participants were mimicked or not by a confederate and over the course of either a face-to-face or webcam interaction. Afterwards, we measured belongingness and trust. The results

show that mimicry conveyed the same amount of trust when it occurred over webcam as compared to a face-to-face interaction, but mimicry did not convey any feelings of belongingness in that way that it did in a face-to-face interaction. Our research is the first step into the new world of communication devices and how it may facilitate—or hinder—people's fundamental need to belong. Further research is needed to examine whether people intuitively (i.e., nonconsciously) perceive digital communication as a viable means of fulfilling their belongingness needs.

### **A process approach towards organizational culture: Integrating empowerment and commitment**

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#### **Purpose**

Corporate culture has been claimed to be one of the main drivers of organizational performance in the management literature (Deal & Kennedy, 1982; Peters & Waterman, 1982). In fact, associations between corporate culture and effectiveness criteria have been demonstrated in several studies (Sørensen, 2002; Hartnell, Ou, & Kinicki, 2011). However, the processes creating a link between corporate culture and outcome criteria are less researched. Drawing on empowerment research (Seibert, Wang, & Courtright, 2011; Thomas & Velthouse, 1990) it is argued that an organizational climate of empowerment—as a manifestation of organizational culture—enhances employees' feelings of self-determination. These empowered employees shall exhibit a high degree of commitment towards their work and organization which in turn results in better work performance.

#### **Design/Methodology**

69,454 employees from 416 companies of Bertelsmann, an international media company participated in an employee survey covering organizational climate, empowerment, commitment, and outcome criteria.

#### **Results**

To test the proposed model Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) have been conducted. Cross-country and cross-sectorial comparisons are investigated. Results provide support for the proposed model.

#### **Limitations**

Despite the large sample generalizability could be limited as all participants of the study are employees of one company. Longitudinal data is needed to further establish causality.

#### **Research/Practical Implications**

A better understanding of the processes linking organizational culture to outcomes is a precondition for adequate diagnosis and influencing approaches.

#### **Originality/Value**

The proposed model explicates the processes linking organizational culture to effectiveness criteria and thus replaces simplifying direct linkage models.

### **My status in the group: linking favourable treatments with organizational identification**

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Social identity theory (Tajfel and Turner, 1986) argues that people need to belong to groups that provide them with high social status to develop their self esteem. The group-engagement model (Tyler and Blader, 2003) adds to social identity theory the idea that status within the group, and not only the sta-

tus of the group, matters to develop feelings of self esteem and consequently feelings of group membership. We propose two studies that test how treatments showing a privileged status in the organization may impact organizational identification, after controlling for group status (e.g. prestige) and need for identification. In line with the theory, we claim that this link is mediated by organizational-based self esteem.

Using structural equation modeling, we tested research hypotheses with data collected over two periods of time among a sample of Canadian managers (N=262) and a sample of French engineers (N=182). With sample 1, we validate hypotheses using psychological contract over-fulfillment as a signal of privileged status. Sample 2 replicates this study and adds idiosyncratic-deals to psychological contract over-fulfillment as a signal of privileged status. With both samples, organizational-based self esteem fully mediates the link between privileged treatment and organizational identification.

Results extend theory about how status within the group is related to the development of identification by (1) establishing that organizational-based self esteem mediates the link between in-group status and organizational identification and, (2) using variables measuring favourable treatment within the group rather than justice perceptions as signals of the in-group status.

### **The paradox of difficult career goals: An examination into the downside of ambition**

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#### **Purpose**

Previous research has shown that ambitious people – despite achieving a higher level of

objective career success - are less satisfied with their careers than people with lower career ambitions. In this study we discuss the downside of ambition by examining why and when people with difficult career goals are less satisfied with their jobs and careers. Based on goal-setting theory we propose a moderated mediation model whereby the indirect effect of goal difficulty on subjective career success through goal attainment is moderated by goal importance.

#### **Design/Methodology**

Using a three-wave study design, we collected data from 181 alumni of a business school. We tested the study's hypothesis with moderated mediation analysis and individual growth modeling.

#### **Results**

Confirming our hypotheses, the results show that goal difficulty predicts the level of career satisfaction and the change trajectory of job satisfaction. People with difficult goals were less satisfied with their jobs and careers because they had a lower level of goal attainment. This negative indirect effect could be offset if the personal goals were highly important to the individual.

#### **Limitations**

Despite the multi-wave design of our study, we cannot infer causality.

#### **Research/Practical Implications**

This study provides practical implications for individual and organizational career management as well as for career coaching.

#### **Originality/Value**

To our knowledge, this is the first study that discusses the downside of career ambition and analyzes the mediating and moderating mechanisms that link it to subjective career success.

### **When does job satisfaction affect OCB, and when does OCB affect job satisfaction? The moderating role of work centrality**

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#### **Purpose**

Work centrality refers to the importance of work in one's life. As has been shown by attitude research, importance is an indicator of attitude strength, with strong attitudes being more predictive of behavior than weak attitudes. Weak attitudes, in turn, are more affected by voluntary attitude-relevant behavior than strong attitudes. Hence, job satisfaction as the attitude toward one's job should be more predictive of organizational citizenship behavior (OCB) given high rather than low work centrality. In contrast, OCB should affect job satisfaction more strongly when work centrality is low rather than high.

#### **Design/Methodology**

We conducted a study with 176 employees of a telecommunication company. At a first point in time (t1) we assessed employee ratings regarding job satisfaction, work centrality, and OCB. Two months later (t2), job satisfaction, OCB, and social desirability were measured.

#### **Results**

Controlling for social desirability, moderated regression analyses showed that job satisfaction (t1) predicted OCB (t2) better when work centrality was high (versus low). In a complementary fashion, OCB (t1) predicted job satisfaction (t2) better when work centrality was low (versus high).

#### **Limitations**

It remains to be tested whether the moderating role of work centrality for the job satisfaction-OCB relationship also holds in the case of supervisor or colleague ratings rather than self-ratings of OCB.

#### **Research/Practical Implications**

The present findings suggest that indicators of attitude strength should be taken into account when studying the relationship of job attitudes with work-related behavior.

#### **Originality/Value**

Our study appears to be the first to show that the same moderator variable may affect the strength of both the satisfaction-OCB and the OCB-satisfaction relationship.

### **Counterproductive work behaviors and job satisfaction – The relation not so simple as we suspected**

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#### **Purpose**

Counterproductive work behaviors (CWBs) are any actions that harm the organization or organization members. They include both breaking the law (e.g. bribery) or social rules (e.g. gossip). Robinson & Bennett (1995) suggested commonly accepted taxonomy, which describe CWBs by two dimensions: who suffers in the result of a behavior (organization or coworker) and how severe offense it is (minor or serious). Many authors consider CWBs as the result of negative emotions and strain in the organization (e.g. Fox, Spector & Miles, 2001). The negative relation between CWBs and job satisfaction can be presumed, according to the desire for revenge.

#### **Design/Methodology**

However the analysis of the results of questionnaire research on above 300 participants show much more sophisticated pattern. It was find out by the cluster analysis that among high-satisfied employees there were quite numerous group with the tendency to CWBs, as well as among low-satisfied ones – the group without such a tendency.

## Results

Detailed tests show specific differences between groups of high vs. low work satisfaction and strong vs. weak tendency to CWBs. For example the lowest level of the anxiety was noticed for the group 'low satisfaction + strong CWBs' and the highest for 'low satisfaction + weak CWBs' with the groups of high satisfaction in-between.

## Research/Practical Implications

These and other differences show the disparate mechanism of the CWBs, depending of the job satisfaction's level.

## Originality/Value

One of the conclusions states that possible source of the job satisfaction for the high satisfied employee is the organizational tolerance of their tendency to CWBs.

### **"Remember me and smile": Helping and voice behaviors in a decaying Portuguese hospital**

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## Purpose

This study examined Organizational Citizenship Behaviors of the globality of workers from a decaying hospital, where services have been closing down progressively and shut down is considered likely, but not certain.

## Design/Methodology

The study was conducted with a convenience sample from a Portuguese hospital through a questionnaire (N=140) composed by descriptive demographic items (age, gender, etc), questions regarding perceived job insecurity and Van Dyne and LePine's (1998) Helping and Voice Behaviors Scale. Structural Equations Modeling was used to assess the impact of perceived Job Insecurity in the different components of Extra-role Organizational Citizenship Behavior Scale we used.

## Results

Results show that concern about one's own professional future is not significantly related to either Helping or Voice Behaviours, but concern about the organization's future is significantly related to both.

## Limitations

his study was conducted using a convenience sample in a relatively small context

## Research/Practical Implications

This study reflects upon the impact of perceived job insecurity in one aspect of the relationship of workers with the organization that goes beyond their work role: extra-role organizational citizenship behaviors. Results from this study support and further some aspects of the Social Exchange Theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960).

## Originality/Value

Job insecurity is a major topic in the current state of the Economy and it will most likely increase in the next years. Realizing the impact of Job insecurity in different aspects of how workers may behave to benefit the organization in turbulent times will become crucial to companies in the years to come.

## Posters

### **Engagement, health, and employee surveys: The JDR in organizational research**

#### **Winner of the EAWOP Congress 2013 Best Practitioner Contribution Award**

Joachim Schroer (tivial GmbH, DE) [joachim.schroer@tivial.de](mailto:joachim.schroer@tivial.de), Frank Gehring (tivial GmbH, DE), Hannah Rexroth (tivial GmbH, DE), Simone Weltzin (tivial GmbH, DE)

#### Purpose

The scientist-practitioner gap often refers to discrepancies between practical demands and scientific supply. As one category of evidence of the scientist-practitioner gap, Hyatt et al. (1997) suggested that research produced by academics may be of little value to practitioners. This poster contributes to the ongoing discussion by examining the use of the Job-Demands-Resources Model (JDR) in employee surveys.

The JDR is state of the art in modeling of the determinants and consequences of engagement und health. Transferring the JDR to work contexts, however, leads to several challenges. Aspects that have been underrepresented in academic research so far include the distinction of demands and resources, as many aspects of the work context can be both demand and resources, depending on their quality. Secondly, leadership can be regarded as an antecedent of both demands and resources.

#### Design, Methodology and Results

A multinational online survey among blue and white collar employees was conducted to test these assumptions. Moreover, follow-up processes of employee surveys were analyzed to provide insight which resources and demands can be addressed as results of employee surveys.

#### Limitations

As a limitation, data referring to follow-up processes of employee surveys are both sensitive in nature and company-specific.

#### Research/Practical Implications

This research aims to increase the practical applicability of the JDR in employee surveys.

#### Originality/Value

These data yield a high ecological validity and are especially suited to examine the transfer of academic research findings to organizational settings.

### **Supporting employees with low levels of engagement: Performance implications**

#### **Nominated for the EAWOP Congress 2013 Best Poster Award**

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#### Purpose

Whilst a mounting body of research has demonstrated the benefits of an engaged workforce, the possibility that the relationship between work engagement and performance varies as a function of a moderating variable has been largely overlooked. This study examines the moderating role of perceived organisational support on the relationship between employee engagement and three facets of individual performance.

#### Design/Methodology

Two questionnaire surveys were carried out in a UK-based manufacturing organisation (time 1 n = 284; time 2 n = 175). Supervisors were asked to assess the task and citizenship performance of their employees (n = 254).

#### Results

Employee work engagement correlates positively with lagged measures of task performance and citizenship behaviour regarding one's peers, and negatively with deviant behaviour. In addition, perceived organisational



support buffers the negative performance outcomes of low levels of work engagement on task performance and deviant behaviour.

#### Limitations

Limitations include the self-report measure of deviant behaviour and the specific organisational context in which the data was collected.

#### Research/Practical Implications

These findings remind practitioners that employee engagement is not a panacea; a focus on a supportive work environment is an alternative way of ensuring high levels of performance. They also encourage future research to explore individual and contextual variables that impact on the relationship between engagement and performance.

#### Originality/Value

The present study is one of few to analyse boundary conditions of the relationship between work engagement and performance. The findings demonstrate that employees who were relatively disengaged performed as well as those who were engaged if they perceived that the work environment was supportive.

### **The moderating role of work self efficacy in the relation between idiosyncratic deals (i-deals) and work engagement**

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#### Purpose

Idiosyncratic deals (or i-deals) are mutually beneficial, personalized agreements of a non-standard nature that are negotiated between individual employees and their employers. (Rousseau, 2005). In a rapid changing work environment, the strategic need to attract and retain a qualified workforce have caused organizations to adopt more flexible human resource practices (Farber and Western, 2000; Cappelli, 2000; Perlow, 1997; Arthur and Rousseau, 1996). This study is the first study in

Turkey that investigates the relation between i-deals and work engagement with moderator effect of work self efficacy. Hypotheses were tested via full data gathered from 263 participants in various sectors.

#### Design/Methodology

Multivariate statistical methods were used to test our hypothesis.

#### Results

Results revealed the significant difference between people who negotiated i-deals and who did not; with higher engagement in groups who have i-deals. Developmental i-deals had an impact on engagement while flexibility and financial i-deals were unrelated to either. Results partially confirmed that engagement is higher in groups who made i-deals (financial dimension) after hire than those made ex ante.

#### Limitations

This study was conducted in Istanbul in Turkey, the results may reveal different indices in other locations.

#### Research/Practical Implications

In different hypothesis we saw that developmental i-deals has a positive effect on work engagement dimensions. But when people add financial dimension to negotiation topic, the level of engagement decreases. It is important to identify reasons in future studies.

#### Originality/Value

This study is the first study on i-deals conducted in Turkey. Developmental i-deals may create difference on employee engagement; we can invest people more with individual differences considering different employee expectations.

### **Satisfaction of psychological needs during work and non-work events**

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#### **Purpose**

The goal of the study was to test whether important psychological needs are better satisfied during work-related events or during non-work related events.

#### **Design/Methodology**

Cross-sectional sample of 81 full-time employed persons. Participants were asked to shortly describe a positive event that they had experienced during the last six months and to answer a set of items measuring the satisfaction of 10 psychological needs during this event. For each need two scales were used, one short scale adapted from the literature on needs (Sheldon, Elliot, Kim & Kasser, 2001), and one newly developed scale with higher reliability.

#### **Results**

The majority of positive events that were reported by the participants occurred during non-work activities. During work-related events, the need for competence was significantly more satisfied than during non-work related events. In contrast, the needs for autonomy, for social contact, for stimulation, for self actualization and for physical pleasure were significantly more satisfied in during non-work related events than during work-related events. The results for the short scales and for the new scales were very similar. The degree of need satisfaction was significantly correlated to positive affect.

#### **Limitations**

The study was restricted to positive events, giving only an incomplete picture of work and non-work experiences. A study asking for typical events is currently conducted.

#### **Research/Practical Implications**

Results relevant for research on work motivation, unemployment, personnel marketing, and work-life balance.

#### **Originality/Value**

Research project appears to be the first one to systematically compare need satisfaction in work and other life domains.

### **The self-regulatory function of achievement goals: Examining achievement characteristic at the level of the subgoal**

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#### **Purpose**

Grounded in theories of achievement goals, and motivated action, this paper proposes that subgoals hold multiple achievement characteristics, which serve an adaptive function in the achievement of principle goals. For example, subgoals can hold the characteristics of approach and avoidance motivations, and mastery and performance motivations, as part of one overarching goal. Secondly, this paper suggests that the interplay between these achievement subgoals serves an adaptive self-regulatory function.

#### **Design/Methodology**

The principle goals of eighty early-stage entrepreneurs were investigated qualitatively via interviews, and the subgoals were classified as mastery approach, performance approach or performance avoidance.

#### **Results**

The results demonstrated that entrepreneurs identified a range of subgoals which represented: one single achievement subgoal, combinations of two out of the three, and combinations of all three achievement subgoals. Further qualitative analyses suggested that holding multiple combinations of achievement subgoals served an adaptive self-

regulatory function, providing the entrepreneur with detailed cognitive primes or frames that could be used as feedback to indicate goal progress.

#### Limitations

Future research will need to test the qualitative findings empirically, and on a broader range of occupations.

#### Research/Practical Implications

This study advances research on achievement goals, demonstrating that even at the state level, entrepreneurs can hold multiple achievement subgoals for the same goal, and that this may serve an adaptive self-regulatory function for performance.

#### Originality/Value

Although earlier research has suggested that a combination of achievement goals can be adaptive, no prior research has examined whether subgoals can exhibit achievement characteristics, nor why they may be adaptive.

### **Self-regulatory processes and work motivation beyond retirement age? A longitudinal study on the relations between self-regulation and work motivation of 60plus workers**

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#### Introduction

Considering the graying and dejuvenization of our workforce, it is crucial to motivate older workers to prolong their working careers (De Lange et al., 2011). Surprisingly few studies have paid attention to the adjustment and self-regulatory processes of workers aged 60plus who remain active on the labor market (Wang & Shultz, 2010). In the present study, we therefore aim to fill this research gap by examining the longitudinal relations between self-regulatory focus, task-induced focus and self-regulatory fit at work (Higgins, 1997) in

relation to the work motivation of 60plus bridge workers.

#### Method

Using an online survey and a prospective cohort design, we examined the workers registered at agency 65plus in 2011 and 2012. On the first measurement N=784 workers responded to the online survey (Mean age of 69.20 years). The second measurement included N=655 employees with an average age of 68.89 years. Moreover, a panel of N=229 employees with an average age of 70.05 years responded to both measurements across time.

#### Results and Conclusions

The results from several MANCOVA's (controlling for calendar age and gender) showed consistent main effects of a person promotion focus and a task-induced promotion focus in predicting work motivation. No consistent and significant results were found for self-regulatory fit at work. These results indicate that in motivating ageing workers, employers should facilitate a promotion focus among their workers and provide challenging or promotion-induced tasks at work.

### **Supporting employees with low levels of engagement: Performance implications**

#### ***Nominated for the EAWOP Congress 2013 Best Poster Award***

Kerstin Alfes (York Univ., CA) [kerstin.alfes@gmail.com](mailto:kerstin.alfes@gmail.com), Amanda Shantz (Kingston Univ., UK), Gary Latham (Univ. of Toronto, CA)

#### Purpose

Whilst a mounting body of research has demonstrated the benefits of an engaged workforce, the possibility that the relationship between work engagement and performance varies as a function of a moderating variable has been largely overlooked. This study examines the moderating role of perceived organisational support on the relationship between

employee engagement and three facets of individual performance.

#### Design/Methodology

Two questionnaire surveys were carried out in a UK-based manufacturing organisation (time 1  $n = 284$ ; time 2  $n = 175$ ). Supervisors were asked to assess the task and citizenship performance of their employees ( $n = 254$ ).

#### Results

Employee work engagement correlates positively with lagged measures of task performance and citizenship behaviour regarding one's peers, and negatively with deviant behaviour. In addition, perceived organisational support buffers the negative performance outcomes of low levels of work engagement on task performance and deviant behaviour.

#### Limitations

Limitations include the self-report measure of deviant behaviour and the specific organisational context in which the data was collected.

#### Research/Practical Implications

These findings remind practitioners that employee engagement is not a panacea; a focus on a supportive work environment is an alternative way of ensuring high levels of performance. They also encourage future research to explore individual and contextual variables that impact on the relationship between engagement and performance.

#### Originality/Value

The present study is one of few to analyse boundary conditions of the relationship between work engagement and performance. The findings demonstrate that employees who were relatively disengaged performed as well as those who were engaged if they perceived that the work environment was supportive.

### **A longitudinal perspective of the influence of employer branding on candidates' attitudes before and after entry**

#### ***Nominated for the EAWOP Congress 2013 Best Poster Award***

*Dorotdée Hanin (Univ. catholique de Louvain, BE) [dorothee.hanin@uclouvain.be](mailto:dorothee.hanin@uclouvain.be), Florence Stinglhamber (Univ. catholique de Louvain, BE), Nathalie Delobbe (Univ. catholique de Louvain, BE)*

#### Purpose

Employer branding (EB) refers to "efforts to promote, both within and outside the firm, a clear view of what makes it different and desirable as an employer" (Backhaus & Tikoo, 2004). To win the "War for talents", organizations diffuse EB-communications in order to generate an attractive image of the firm as an employer. This research studies (a) the effects of EB-communications on candidates' attitudes both before and after their entry in the organization and (b) the mechanisms underlying these relationships.

#### Design/Methodology

A sample of 387 candidates applying to a federal department responded to 3 questionnaires (before, 1.5, and 5 months after entry). Items measuring EB-communications were selected based on prior focus groups. Most of the other measures were previously validated scales.

#### Results

Results indicate that EB-communications influence candidates' attitudes before (organizational attractiveness and recommendation intentions) and after (job satisfaction, affective commitment, and recommendation intentions) entry. These effects are mediated by social exchange and identity variables (before: anticipated perceived organizational support and organizational pride; after: perceived organizational support and organizational pride). However, when including day-to-day favorable experiences as control variables, the influence

of EB-communications on attitudes after entry disappears.

#### Limitations

The research should be replicated in other organizational contexts.

#### Practical Implications

EB-communications influence candidates' short-term attitudes toward the organization. However, a few months after entry, their day-to-day experiences become most important predictors of their attitudes.

#### Originality/Value

Most studies on the influence of EB on candidates' attitudes are cross-sectional. This research examines long-term effects of EB-communications, i.e. on attitudes after organizational entry.

### **Is voice always important? Different patterns for employees and volunteers with various underlying motives**

*Kathleen Otto (Univ. of Leipzig, DE) [kathleen.otto@uni-leipzig.de](mailto:kathleen.otto@uni-leipzig.de), Sarah Götze (Univ. of Leipzig, DE)*

#### Purpose

Former field studies suggest that underlying motives for volunteering play a role in explaining the relationship of procedural justice and turnover intentions. In an experimental study we manipulated procedural justice (voice vs. no voice), motives (social vs. career-related) and type of employment (honorary vs. paid) and expected that different consequences emerged for mood and turnover intentions.

#### Design/Methodology

In a three-way experimental design (justice x motive x type of employment) our 96 participants read a scenario in which an employee who should take over a project was treated just (voice) or unjust (no voice). After reading the scenario the participants estimated (a) how much they felt enthusiastic (positive

mood), or (b) irritated (negative mood) and (c) how likely they thought about leaving the institution (turnover intentions).

#### Results

ANOVAs confirmed our expected three-way interactions for turnover intentions and negative mood, whereas for positive mood only a two-way interaction (justice x motive) was found.

#### Limitations

We used a student sample and did lab research. It hence remains unclear in which extent our findings can be generalized.

#### Research/Practical Implications

It turned out that the type of employment (honorary vs. paid) impacts on turnover intentions. Particularly volunteers (not employees though) with career-related motives value voice and are vulnerable to unjust experiences where their opinion is not considered.

#### Originality/Value

Overall, there is only less research focusing on justice perceptions in the volunteering context. We go beyond prior research by contrasting the consequences of procedural justice considering besides underlying motives also the type of the employment.

### **Are public organizations more stressed than private? A study of work stress considering value congruence**

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#### Purpose

The purpose of the present research is to study differences between private and public organizations according to their work stress and value congruence.

**Design/Methodology**

For this reason, we applied an inventory in a private and public organization to measure the perception of the work stress and the value congruence considering person-organization fit, value conflict and value recognition. Samples were matched in order to make comparisons according to gender, age and employed time in the organization ( $N_{private}=N_{public}=149$ ).

**Results**

Our results indicate statistically significant correlation between stress and gender ( $\beta_{men}=-.420, p<.05$ ), stress and value conflict ( $\beta=.021, p<.05$ ) and stress and type of organization ( $\beta_{private}=.339, p<.05$ ). Correlations between stress and value conflict were previously found by Morais, Ramos, and Jordão (2012). In the case of gender, we found several studies that show similar results (Hart & Cress, 2008; Liu, Spector, & Shi, 2008) and others that contradict them (Loosemore & Waters, 2004; Morash, Kwak, & Haarr, 2006). According to the type of organization, we also found studies that confirm our results (Fernandes, Kumar, & Mekoth, 2009; Sankpal, Negi, & Vashishtha, 2010), however other authors had different outcomes (Ferreira & Martinez, 2012).

**Limitations**

Our results are valid for a Portuguese context, which may be considered as a limitation of the study.

**Research/Practical Implications**

The research represents a contribution to the comprehension of differences that exists between public and private organizations according to stress levels.

**Originality/Value**

This type of comparison has never been made in the Portuguese context, and it is a contribution to the value congruence model and its relationship with work stress.

**Cultural differences in intelligence according socio-demographic and context variables**

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**Purpose**

Cultural intelligence (CQ) is defined as the capability to function effectively in culturally diverse settings (Dyne, et al, 2008; Early & Ang, 2003). Dyne et al., (2008) understood CQ as an important individual capability that manifest itself through four dimensions: metacognitive CQ, cognitive CQ, motivational CQ and behavioral CQ. Despite the growing importance of CQ, few researches has explored which elements influence CQ. The aim of this study is to examine relations between Cultural Intelligence and both socio-demographic variables and type of contact with individuals from other nationalities.

**Design/Methodology**

A cross sectional study using questionnaires was conducted. Participants ( $N = 275$ ) responded to the scale CQ adapted to Portuguese by Sousa, et al (2012). The instrument showed adequate levels of reliability. Data collection was administered individually.

**Results**

Results showed that men had higher average CQ than women ( $p < .05$ ) in all dimensions except in motivational CQ. In regards to the participants' qualifications, individuals with university studies had higher CQ values than individuals with high school studies. Furthermore, contact with people from other nationalities in an employment context conducive for further development of skills in CQ ( $\beta = .141, p = .023$ ) compared to the interaction between friends.



**Limitations**

Numbers of interactions and quality would be variables to be controlled in future research.

**Research/Practical Implications**

Organizations could use the CQS (both self-report and observer-report) to identify employees who would be particularly well-suited for overseas assignments.

**Originality/Value**

The CQS has exciting implications for global leadership in work international context that are culturally diverse.

### **Motivational orientations and organizational citizenship behavior of members of youth associations**

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**Purpose**

Analyzing motivational orientations and organizational citizenship behavior of members of youth associations helps the leaders of the youth associations to consciously guide general activities and members of the association. The purpose of this study was to analyze the relationship between organizational citizenship behavior and motivational orientations of active members of youth associations.

**Design/Methodology**

Web-based survey of members of youth associations (n=208) aged between 16-26 yrs using Work Preference Inventory (Amabile, Hill, Hennessey, Tighe, 1994) and Citizenship Behavior Questionnaire (Smith, Organ, Near, 1983).

**Results**

As expected (1) intrinsic motivation to be a part of the association was higher than the extrinsic motivation, (2) the level of organizational citizenship behavior was high (level of generalized compliance was higher than altru-

ism), (3) altruism is positively correlated to intrinsic motivation ( $r=0.36$ ,  $p<0.01$ ) and negatively to extrinsic motivation ( $r=-0.21$ ,  $p<0.01$ ), (4) intrinsic motivation to participate in youth organization decreases with age ( $r=0.28$ ,  $p<0.01$ ).

**Research/Practical Implications**

This study gives valuable information about what motivates members of younger generations to volunteer, and can be used in business and governmental as well as third sector organizations. It appears that although intrinsic motivation is an important predictor of organizational citizenship behavior, it is not related to compliance to organization (i.e. does not predict punctuality, not taking extra breaks, attending the meetings etc).

**Originality/Value**

To our knowledge, there is no research about organizational citizenship behaviour of members of youth organization.

### **Organizational commitment and citizenship behaviors: The role of volunteerism, organizational culture and affectivity**

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**Purpose**

This study aims to investigate the impact of volunteerism (motivation for helping), organizational culture and positive and negative affectivity on organizational commitment (OC) and organizational citizenship behaviors (OCBs).

**Design/Methodology**

Data were collected from 248 middle level managers from twenty different locations of a power generation company in India. The standardized questionnaires were administered to collect the survey data and correla-

tional and regression analysis were used to analyze the data.

#### Results

Results indicated that personal development dimension of volunteerism and positive affectivity were found to be the positive predictors of OC and OCBs both. However, career enhancement, empathy and community concern dimensions of volunteerism had mixed effects on both the criterion variables. Negative affectivity had no impact on OCBs; however it had a negative impact on affective commitment. Furthermore, culture had no impact OCBs; however solidarity dimension (task focus) of culture had positive influence on affective and continuance commitments. Moreover, demographic variables (age and education) had more significant impact on commitment than citizenship behaviors.

#### Limitations

The data were collected from the managers of a single public sector organization in India and all of them were male; hence generalizability is limited to such contexts.

#### Research/Practical Implications

The implications of these results include improving the level of commitment and OCBs by focusing on volunteerism (Personal Development) and Positive Affectivity) at individual level and culture of solidarity at organizational level.

#### Originality/Value

This is the first study which has empirically investigated the impact of volunteerism on managers' attitude (commitment) and behavior (OCBs) in India.

### **The fit index: A new perspective for person-organization fit analysis**

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#### Purpose

Organizational and personal values congruence has been extensively studied. Although, there is no agreement about Person-Organization (P-O) Fit measurement methodology. Commensurability among different scales requires extra attention in theory and scales selection. The Schwartz's value theory is undoubtedly the most used and stable theoretical argument for personal value. In spite of Schwartz theory being a bi-dimensional model, all of P-O fit evaluation instruments are based on linear approach. For instance, correlation, dispersion measurements, Gini index, distances, fail to produce a global fit index. Moreover, these methodologies do not consider the effect of values intensity. In this context, this work presents, a new P-O fit measurement methodology based on vector calculus. The Fit Index (FI) shed a light on the two main limitations presented by other measurements methodologies: intensity ignoring and global index problems. The FI is based on a conceptual mathematical model, which is not limited by statistics concerns.

#### Design/Methodology

The FI consists on determining the vectors related with each attribute and calculate the resulting vector which summarizes the axiological priorities of each P-O entity. The angular difference between resulting vectors and the intensity of overall resulting vector compose the FI.

#### Results

The FI represents an easy way to demonstrate and interpret the congruence results, bringing objective meaning to observations.

#### Limitations

The Fit Index is hardly compared to other fit measurements.

#### Originality/Value

FI is an innovative methodology to obtain a meaningful comparison between Personal and

Organizational attributes and could be very helpful in congruence analysis.

### **Work-oriented training on values in organizations**

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(Univ. of Munich (LMU), DE)*

#### **Purpose**

Values have increasingly gained recognition as important factors for organizational success in recent years. Values are a major component of an organization's culture and can be associated with e.g. loyalty of employees or ethical leadership. Accordingly, it becomes an important goal to impart values in organizations in the context of education for professional practice.

#### **Design/Methodology**

Our study is based on a multi-step approach including a value-related training needs assessment with managers and employees of German cooperative banks consisting of an online survey (n=692) and interviews to specify the training needs. Based on the results a stakeholder workshop to specify the values and collecting authentic scenarios with ethical dilemma situations was conducted and ends with the development and integration of authentic case examples suited for training.

#### **Results**

According to managers and employees values are an important topic in cooperative banks. A closer look revealed that there are problems in relating abstract values to practical examples for action. Therefore we develop and integrate authentic work-oriented cases.

#### **Limitations**

In a further step our results need to be tested how much they generalize in other banks.

#### **Research/Practical Implications**

The empirical part of this project demonstrates that values have to be related to practical work-oriented situations to find out specific training needs. The developmental part demonstrates how value-oriented training measures can be tailored to training needs by drawing on authentic cases.

#### **Originality/Value**

The multi-step approach presented here can serve as an example for a comprehensive procedure to improve value orientation by using authentic cases.

### **Young adults' willingness to participate in union activities**

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#### **Purpose**

Unionization is a common, worldwide workplace feature. However, union density in the USA (12.5%) and Canada (30%) is much less than in most of Europe, where it is above 70% in Scandinavian countries. Currently, many North American governments have initiated anti-union campaigns. Previous research on union support has identified family attitudes toward unions as formative on the attitudes of youth toward trade unions. We examined the willingness of students to support union and strike activity. We proposed that perceptions of union instrumentality and pro-union behaviors on the part of parents would predict pro-union attitudes among students.

#### **Design/Methodology**

303 university students answered questions on union attitudes, union instrumentality, Marxist and humanistic work beliefs, parents' involvement in unions and strikes, willingness to join a union, and willingness to strike.

### Results

Hierarchical regressions showed that significant predictors of willingness to join a union were instrumentality ( $\beta = .44$ ), Marxist beliefs ( $\beta = .22$ ), union attitudes ( $b = .17$ ) and parents' participation in strikes ( $\beta = .17$ ), accounting for 38% of variance ( $F = 15.94$ ,  $df = 5, 130$ ,  $p < .001$ ). The same four variables significantly predicted willingness to strike accounting for 34% of variance ( $F = 17.24$ ,  $4, 131$ ,  $p < .001$ ).

### Limitations

The sample consisted primarily of pre-employed students with no or little actual experience with unions, and the results may not generalize to a non-student population.

### Research/Practical Implications

Unions can use these results to attract youth in unionization campaigns.

### Originality/Value

This study demonstrates the impact of parental behavior on youth attitudes toward unions.

## **The impact of leadership behavior on climate emergence. A longitudinal study**

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### Purpose

A significant amount of research demonstrates that leaders influence group-level fairness perceptions (i.e. justice climates) (e.g. Ehrhart, 2004; Mayer et al., 2007). However, while there seem to be an empirical link between leader behaviors and the justice climate level, to date no study has examined the process of justice climate emergence. Using the framework of a repeated "dictator game", we examine how leader behaviors and follower reactions interact to shape both the level and

strength of the justice climate that emerges in a work group.

### Design/Methodology

Drawing on social information processing theory (Salancik & Pfeffer, 1978), socialization (Ostroff & Kozlowski, 1992) and social comparison theory (Festinger, 1954); we tests the influence of two specific leadership patterns (consistently selfish versus consistently generous) on the strength and level of the justice climate over time. To further probe the process of climate emergence, we also examine the role of followers by varying two variables: 1) the amount of communication; 2) the ability to compare with other groups. As such we have a 2 (selfish vs. generous leader) x 4 (interaction vs. consistent follower feedback; more selfish leader behavior vs. more generous leader behavior) design.

### Results

Although data collection is ongoing, early results seem to support our hypotheses regarding the effects of leader behavior on climate level and strength.

### Limitations

The use of experimental design may limit the generalizability of our findings.

### Research/Practical Implications

This study highlights the importance of time inherent in climate emergence theories.

### Originality/Value

To our knowledge, this study is one of the few studies analyzes justice climate emergence longitudinally.

## **Social recognition and organizational commitment**

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### State of the Art

Although in practical organizational life recognition of work is mostly accepted as a notable way to recognize and acknowledge the employees contribution to the accomplishment of job-related tasks and the achievement of organizational objectives it does not stand at the core of research in the field of work and organizational psychology. On the contrary in philosophy, sociology and partly in psychoanalytical theories social recognition has been treated as a general and essential part of human social interaction and societal life.

Axel Honneth has attempted to merge the findings of these different disciplines. He states an inherent need of individuals for recognition as an indispensable base for self development and societal integration. He delineates three different types of social recognition whereby the third one – the demand for recognition as a unique person in public social life – is most instructive for psychological theory construction and research in the field of work and organizational behavior. This kind of social recognition occurs when one is respected in virtue of one's membership and contribution in a social group. Recognition of this sort verifies one's social existence as a worthy member of society and promotes self-esteem.

### New Perspective/Contribution

Defining social recognition in the field of work and organizational behavior needs not to restrict the concept to such terms like appreciation, respect and praise. Social recognition refers to each communication act that recognizes and acknowledges the work of another person. That includes also kinds of constructive and continuative criticism.

Simultaneously the notion of social recognition should be winnowed from other similar concepts like response and feedback and. In the behaviorist notion of response the contribution to the constitution and development of social identity is missed. In the communica-

tional concept of feedback no inherent reference to the object is established. According to Paul Ricoeurs notion recognition is a three-dimensional construct that includes beside the communication partners of mutual recognition the reference to the object of social recognition – in our perspective mainly the product of work which is recognized within an own corresponding act of cognition.

According to this understanding social recognition of work is addressed to the other as a professional in one's domain of work. Recognizing and acknowledging one's contribution to the societal exchange of achievements the worker is tied to the organization and the society as a valuable member. This leads to self-esteem and professional identity but beyond that social recognition leads to the impression that the contribution of the worker is meaningful and significant for organizational and social welfare.

Furthermore introducing social recognition into the field of work involves a modified understanding of work. Opposite to those concepts which focus mainly the object of a job in this paper work is comprehended as a specific kind of social action. Only in the case work is comprehended as contribution to the exchange of achievements within the society the question of recognition in the field of work arises. Social recognition then turns out to be a determining factor that feeds social integration of the individuals as parts of a differentiated society which can be characterized by division of work and individualization.

During some years of own empirical research in this field some instructive results have been achieved. According to the relation of social recognition and work motivation we found out that that recognition of leaders, colleagues and customers correlates mainly with intrinsic and achievement motivation. No significant correlation was found with social and

power motivation. This result matches the theory presented in this paper.

In another study the relation between different modes and types of recognition and leadership styles has been examined. Beside other results it was found that mainly participative leadership uses beneficial ways of social recognition like appreciation in direct communication, enlargement of responsibility, but also adequate criticism. Authoritarian leadership primarily harks back to reprehension and criticism which is mainly addressed to the person less to the achievement of the job.

Other empirical findings refer to the relation of social recognition and organizational commitment. Significant correlations have been identified between social recognition and affective as well as normative commitment.

#### Conclusion and Implications for Research/Practice

According to the outlined theoretical thoughts and empirical findings social recognition should be one of the major subjects of psychological research in the field of work and organizational behavior. It bundles different main perspectives of work and organizational behavior like job satisfaction, motivation, leadership and organizational commitment. Moreover using the concept of social recognition enables to join constructively the occasionally divergent views of work and organizational psychology.

Implications for practice can be shown with reference to organizational development tools like the appreciative inquiry. Within this method the focus lays mainly on what is done well in an organization. So problems and mistakes are merely not raised. Instead of that questions like "What works well?" or "What's good about your organization?" are posed. Appreciative inquiry avoids limiting organizational change solely to problem solving. So the focus is laid transformational change that en-

visions processes and practices that will work well in future.

#### Motives in paid work at non-profit organizations

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##### Purpose

To describe the motivations of paid employees at Non Profit Organizations (NPOS) based on Self-Determination Theory. To assess the impact of each kind of motivation and the identification of the employee with the organisation, in intention to stay in the organisation.

##### Design/Methodology

A descriptive and explicative research through an online questionnaire released by "União Distrital de Instituições Particulares de Solidariedade Social do Porto " to 102 of its associates. Structural equation modelling allowed determining relations between the variables.

##### Results

The results show that the most internalized motivations are the most valued by the employees, that there is a strong intention to stay in the organisation. Two out of six types of motivation have a predictive role of the intention to stay in the organisation. It was also possible to conclude that employees of NPOs in Porto identify strongly with the organisation they work for, and that this intensifies the impact of their motivations in the intention to stay in the organisation.

##### Limitations

The main limitation of this study refers to the use of a convenience sample, which does not guarantee the representativeness.

##### Research/Practical Implications

Personnel selection should be based upon the motivation profile, and NPOs can foster a



sense of "we", to strengthen their relationship and loyalty to the organisation.

#### Originality/Value

This research has contributed to the study of motivation in paid work at NPOs in Portugal. In spite of intrinsic motivation being the most valued type of motivation, it does not lead to employees' intention to stay in the organisation and external regulation has a more important role.

### **The Issue of presenteeism in organisations: Establishing construct, nomological and predictive validity**

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#### Purpose

Presenteeism is defined as, "a situation when employees are at work but, because of illness, injury, or other medical conditions, not functioning at peak levels" (D' Abate & Eddy, 2007, p.361). Although a subject of immense interest to scholars in occupational health, organisational researchers lack a common consensus in defining and measuring presenteeism as presenteeism has always been difficult to measure due to its conflicting conceptualisations. Thus, in hopes of helping to further the study of presenteeism in organisational contexts, in this paper we (a) extend the construct of presenteeism (study 1), (b) report on efforts to develop and validate a measure of presenteeism (study 2) and, (c) report on a study that shows the relationship between presenteeism and individual performance related constructs.

#### Design/Methodology

Following the guidelines on scale development; an initial 23 item scale of presenteeism was developed from study 1 (N = 16 focus group interviews). Study 2 consisted of EFA (N = 410) and CFA (N = 422) analyses to establish

construct validity. Finally study 3 (N = 537) established predictive and nomological validities.

#### Results

The results supported the evidence of a 16-item uni-dimensional measure of presenteeism.

#### Limitations

It remains to be tested how the findings of this research, which are based on Indian CC sample, can be generalised to other contexts.

#### Research/Practical Implications

By clarifying the neglected hitherto, the studies contribute in providing with a nomologically reliable and valid measure of presenteeism.

#### Originality/Value

To the best of our knowledge the studies mentioned are the first to methodically develop a measure of presenteeism.

### **Why women rarely rise to the top: A social identity model of leader prototypes**

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#### Purpose

We propose a social identity model of leader prototypes to address why the maleness of leader prototypes is more pronounced among men than among women (e.g., Schein, 2001). Specifically, we argue that individuals project their ingroup prototype (e.g., a male prototype) onto a valued other category (e.g., leaders) (e.g., Wenzel, Mummendey, Weber, & Waldzus, 2003) in order to maintain a positive ingroup (e.g., gender) identity. We hypothesized that both women and men engage in ingroup projection of their gender prototype on their leader prototype, and we expected

this effect to be stronger for men than women. We also investigated intelligence as a moderator of ingroup projection.

#### Design/Methodology

Participants (276 students, University of Lausanne) assessed to what extent attributes on a list of gender traits were characteristic of a successful leader. We computed relative ingroup similarity scores (e.g., Walz & Mummendey, 2004) representing the difference between how characteristic ingroup traits are for a successful leader, and how characteristic outgroup traits are for a successful leader.

#### Results

Results showed that men engaged in ingroup projection while women engaged in outgroup projection, and that men engaged in ingroup projection to a greater extent. We also found a small, but positive effect of intelligence on ingroup projection among men.

#### Limitations

The use of a student sample might limit the external validity of our findings.

#### Research/Practical Implications

Our findings contribute to research on the under-representation of women in managerial roles, and introduce intelligence as a predictor of ingroup projection.

#### Originality/Value

Our study allows for a more fine-grained understanding of the cognitive representations of leaders of men and women.

### **Cognitive and affective trust between HR business partners and line managers**

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#### Purpose

Research has suggested, that trust is critical to cooperation within organizations.

This study examines the impact of trust on cooperation between HR Business Partners and line managers. As in the last years a new understanding of HRM's role arises, it is important for HR Business Partners, that line managers, as their new internal costumers, trust them and recognize them as an additional value for their one work. A qualitative pre-study showed, that consulting competence and communication are critical for trust and cooperation. This study investigate a conceptual model to explain cooperation by the two separate dimensions of trust - affective and cognitive - in relation to consulting competences and communication.

#### Design/Methodology

We run a questionnaire based on McAllister's trust dimensions and HR job performance. The study includes line managers (N=86) from six companies.

#### Results

The empirical results show that personal , high frequently communication leads to high affective trust and effects satisfaction with HR performance, while special competences lead to high cognitive trust and more often use of HR services and higher satisfaction as well.

#### Limitations

Our focus was on HR Business Partners and line managers in bigger companies and cannot generalize to smaller companies and companies which deny change in HR roles.

#### Research/Practical Implications

These results imply that HR Business Partners can be trained to increase the chances of the acceptance of their new role.

#### Originality/Value

Trust has been one of the most widely studied constructs in organizational research. Our model helps to clarify interpersonal trust further on.

### **Career goals setting – Comparative study on Norwegian and Polish students**

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The study will cover the specificity of settings goals, including career objectives in the transition period between the education years and working life. This period is perceived as the first and most important life experience within the interdependence between learning and professional work. It is characteristic that in this period, people truly dedicate a great amount of energy to building meaningful goals, hoping that they will be able to create a new life situation in accordance with their plans. Because, when major changes occur in our personal or professional lives, we pay more attention to our objectives and ways of their achievement.

University time is a period of transition from education to working life, hence the choice of students as the research group. The results of the research on goal setting enrich the knowledge about motivational processes of people which is useful at the field of career guidance services. Comparing students from different countries (cultures) we can observe how cultural factors influence goals setting processes and identify similarities and differences between cultures.

### **The link between teachers and their work**

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#### **Purpose**

In Brazil education has increasingly acquired characteristics of a strong economic sector and teaching has become more demanded. Naturally this process fosters the appearance

of studies that attempt to know the variables involved in the engagement between teachers and their work. By adopting the three-dimensional model of organizational commitment and four-dimensional model of career commitment, this study contrasted the outcomes of two groups, one formed by teachers of the public sector and another by teachers of the private sector. It was guided by the hypothesis teachers in private sector were more committed to organizations and careers than teachers of the first group.

#### **Design/Methodology**

In order to test the hypothesis groups were composed of 36 teachers of the public segment and 12 teachers of the private segment who responded to the questionnaires on organizational commitment and career. All of them work in the region of Vale do Aço in the state of Minas Gerais.

#### **Results**

Despite the difference in the number of participants between groups, the analyses extracted by the T-test corroborated the hypothesis of the study.

#### **Limitations**

It is suggested a replication of this study in a larger number of participants to achieve a greater depth.

#### **Research/Practical Implications**

These reflections allow knowing the relationship between teachers, their careers and their institutions, besides enable reflections to improve the administration of the work systems.

#### **Originality/Value**

This comparative study was funded by Fundação de Amparo à Pesquisa do estado de Minas Gerais - FAPEMIG and demonstrates important findings to a region that is emerging as a center of education and work.

### **The structure of favorite organizational values and perceived organizational values**

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#### **Purpose**

Organizational values are principles that guide the life of the company, whereas favorite organizational values are defined as individual preference for organizational values. The present study aims to evaluate the degree of similarity between these axiological structures – perceived organizational values and favorite organizational values.

#### **Design/Methodology**

The Favorite Organizational Values Scale was applied in a sample of 254 Brazilian college students with and without work experience. We compared this structure with the perceived values obtained from the Organizational Values Scale administered to a sample of 229 Brazilian military officials.

#### **Results**

The favorite organizational structure of values obtained from the multidimensional scaling (MDS) presented five motivational types with adequate psychometric characteristics ( $S\text{-Stress}=0.14$ ; Tucker congruence coefficient= $0.97$ ), as follows: Harmony ( $n=4$ ,  $\alpha=0.71$ ), Egalitarianism ( $n=5$ ,  $\alpha=0.73$ ), Innovation ( $n=6$ ,  $\alpha=0.72$ ), Mastery ( $n=5$ ,  $\alpha=0.62$ ) and Conservatism and Hierarchy ( $n=11$ ,  $\alpha=0.86$ ). The MDS analysis for perceived organizational values revealed a structure with satisfactory indicators ( $S\text{-Stress}=0.04$ ; Tucker congruence coefficient= $0.99$ ), containing the following motivational types: Conservatism and Hierarchy ( $n=11$ ;  $\alpha=0.87$ ), Mastery ( $n=6$ ,  $\alpha=0.78$ ), Autonomy ( $n=7$ ,  $\alpha=0.94$ ), Egalitarianism ( $n=4$ ,  $\alpha=0.90$ ) and Harmony ( $n=6$ ,  $\alpha=0.85$ ).

#### **Limitations**

Further studies should be conducted with other organizations in order to confirm the universality of results herein found.

#### **Research/Practical Implications**

The results suggest that favorite organizational values in compatibility studies between the individual and the organization has adequate nominal commensurability with organizational values construct.

#### **Originality/Value**

The results indicate, in an unprecedented manner, the similarity between the motivational types underlying the perceived organizational values and favorite organizational values in alignment with Schwartz Cultural Value Theory.

### **ICT, bureaucracy, and quality of working life**

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#### **Purpose**

In the public sector, the use of Information and Communication Technology (ICT) is increasing sharply. We developed a mediator-moderator model, based on the Job Demands-Control model (Karasek, 1979) and the Job Demands-Resources model (Bakker and Demerouti, 2006) to predict the consequences of more ICT-use. We expected more bureaucracy, and the rise of bureaucracy should lead to increases of work pressure and decreases of job resources (e.g., autonomy). These changes were hypothesized to diminish Quality of Working Life (QWL) and organizational outcomes. Job demands and job resources were hypothesized to moderate the effects of each other on stress reactions and motivation.

**Design/Methodology**

Questionnaires were filled out by employees (N = 58) of a municipal Welfare Services department. Later, in-depth interviews were held (N = 14).

**Results**

In general, the model stood its test well. However, it is not clear whether using more ICT will result in less autonomy. Data imply that there may be differences in the characteristics of autonomy. Therefore, ICT could perhaps improve QWL in the future.

**Limitations**

The present study is cross-sectional. In future research the model should be tested with longitudinal designs.

**Research/Practical Implications**

The study offers insights into the risks of internal differentiation, downgrading and underutilization of employees as effects of ICT. Practical interventions to improve QWL may be based on the model.

**Originality/Value**

Combining several theoretical models resulted in attention to both positive and negative effects of ICT. Combining questionnaires with interviews improved the "implementation value" of the study.

### **Benevolent sexism, affirmative action and gender relations**

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**Purpose**

Affirmative action programs reflect a protectionist behavior towards women and are also

associated with benevolent sexism and the new forms of sexism (eg, Tougas, 1995). The aim of this study is to explore the relationship between benevolent sexism (Glick & Fiske, 1996), affirmative action, threat to traditional values, and interests of working men.

**Design/Methodology**

A cross sectional study using questionnaires was conducted. The sample consisted of 510 participants (68.8% females; Mage = 33.3, SD = 12.95). Data collection was administered individually and guaranteed the ethical requirements.

**Results**

Results showed a statistically significant difference in the strength of the correlation between affirmative action and benevolent sexism for males and females ( $r^2 = .106$ ,  $p < .000$ ). Also, there is a negative relationship with the threat to labor interest for both genders ( $b = -.301$ ,  $p < .000$ ).

**Limitations**

Further studies should examine the relationship between cultural values and variables with discriminatory behavior in the workplace.

**Research/Practical Implications**

The results replicated the findings reported by Tougas (1995). These findings could contribute to the construction of a theoretical model that supports social measures more effective.

**Originality/Value**

Studies in Portugal have not considered the set of explanatory variables maintaining sexism in organizations.

### **Adapation of CWEQ-II in a Spanish teaching and non-teaching sample at University**

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#### **Purpose**

According to Kanter's (1993) theory of structural empowerment, empowerment is promoted in work environments that provide employees with access to information, resources, support, and the opportunity to learn and develop. The aim of this study is to analyze the psychometric characteristics of the Conditions of Work Effectiveness Questionnaire (CWEQ-II) developed by Laschinger, Finegan, Shamin, and Wilk (2001).

#### **Design/Methodology**

A cross sectional study using questionnaires was conducted. The sample consisted of 210 participants (57.6% women) from a public Spanish university (57.1% no teaching employees, 42.9% teachers) aged between 24 and 60 years old ( $M = 42.53$ ;  $SD = 7.92$ ). Data collection was administered individually and guaranteed the ethical requirements.

#### **Results**

The 12 items were subjected to principal components analysis (PCA) using SPSS version 20. Prior to performing PCA, the suitability of data for factor was assessed. The Kaiser-Meyer-Olkin value was .83, and Bartlett's Test of Sphericity reached statistical significance. PCA revealed the presence of four components with eigenvalues exceeding 1, explaining 63.25% of the variance. A good fit to the original model was observed. The Cronbach Alpha measure of reliability was .89.

#### **Limitations**

Further studies imply an increase of the sample and confirmatory analysis should be performed.

#### **Research/Practical Implications**

Results replicated the structure reported by Laschinger, et al. (2001): access to opportunities, support, information and resources. It could help organizations management to promote empowerment, testing the organizational structures.

#### **Originality/Value**

As no validated instrument to map structural empowerment exists at the moment in Spain, CWEQ-II is an adequate tool for this purpose.

### **Metric evidence of Spreitzer's psychological empowerment scale with a Spanish teaching and non-teaching sample at university**

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#### **Purpose**

According to Spreitzer (1995), psychological empowerment in workplace is defined as a intrinsic motivation that manifests itself through four types of cognition, each reflecting an orientation toward work, specially, meaning, competence, self-determination, and impact. The aim of this study is to analyze the psychometric characteristics of the Spreitzer's 12-items psychological empowerment scale.

#### **Design/Methodology**

A cross sectional study using questionnaires was conducted. The sample consisted of 210 participants (57.6% women) from a public Spanish university (57.1% no teaching employees, 42.9% teachers) aged between 24 and 60 years old ( $M = 42.53$ ;  $SD = 7.92$ ). Data



collection was administered individually and guaranteed the ethical requirements.

#### Results

The 12 items were subjected to principal components analysis (PCA) using SPSS version 20. Prior to performing PCA, the suitability of data for factor was assessed. The Kaiser-Meyer-Olkin value was .80, and Bartlett's Test of Sphericity reached statistical significance. PCA revealed the presence of four components with eigenvalues exceeding 1, explaining 82.72% of the variance. A good fit to the original model was observed. The Cronbach Alpha measure of reliability was .87.

#### Limitations

Further studies are to examine this model of psychological empowerment in others contexts and at different organizational levels.

#### Research/Practical Implications

The results replicated the structure reported by Spreitzer (1995): meaning, competence, self-determination, and competence. Spreitzer's model provides a framework for understanding empowering workplaces and empowered employees.

#### Originality/Value

This scale could be used as a tool to test the effectiveness of organizational empowering strategies.

### Workaholism as work craving

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#### State of the Art

The main modern psychometric models of workaholism (Robinson, 2007; Schaufeli, Shimazu, & Taris, 2009; Spence & Robbins, 1992) focus mainly on descriptive criteria of obsessive-compulsive tendencies for identifying

workaholism and do not consider the functional role of emotional processes in maintaining workaholism. Among the criteria commonly used in the literature to diagnose workaholism are two characteristics: on the one hand, obsessive thinking about work, and, on the other hand, repeated efforts to switch off from obstinate working (e.g., Robinson, 2007; Schaufeli, Shimazu, & Taris, 2009; McMillan & O'Driscoll, 2006). These characteristics highlight that, despite understanding the negative consequences of continued working, workaholics (similar to gamblers) at times experience an overwhelming, often irresistible, craving to engage in a certain behavior, in this case, working. A major stumbling block for craving research in gambling has been the lack of a methodologically sound, multidimensional measure of work-related craving.

#### New Perspective/Contribution

In this presentation, we introduce a conceptualization of craving that functionally explains workaholism as work craving and present the Work Craving Scale (WCS; Wojdyło & Buczny, 2010) as a measure for this construct. We define work craving as a pathological desire for work which comprises besides an obsessive-compulsive component, hedonic and learned components as critical features in work addiction. In analogy to other cravings (cigarettes, gambling), a multidimensional model for work craving differentiates following components: (1) obsessive-compulsive desire for work, (2) anticipation of self-worth compensatory-incentives from work, (3) anticipation of reduction of negative affect (relief) or withdrawal symptoms resulting from working, and (4) neurotic perfectionism. The conceptualization of workaholism as work craving is the new proposition to identify and measure the addictive nature of workaholism.

#### Conclusion and Implications for Research/Practice

The results imply that the WCS scores have acceptable psychometric properties ( $N > 1400$ ; RMSEA = .074, CFI = .975) and can be used in studies on pathological organizational behavior.

We see some incremental value of the Work Craving Scale in comparison to the existing measures of workaholism: the Work Addiction Risk Test (WART, Robinson, 2007), the Workaholism Battery (WorkBAT, Spence & Robbins, 1992), or the Dutch Workaholism Scale (DUWAS, Schaufeli, Shimazu et al., 2009). In addition to obsessive-compulsive symptoms, the WCS includes the hedonic and learned components inherent in the addiction. The WCS measures workaholism as a craving phenomenon. With our model of work as craving, we argued that three further dimensions are critical for the diagnosis of work addiction: anticipation of self-worth incentives, anticipation of relief, and neurotic perfectionism.

### **Distributive and interactional organizational justice between the years 2000 and 2008: What changes and what remains the same?**

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#### **Purpose**

This study analyses distributive and interactional organizational justice perceptions in a Portuguese service sector company between the years 2000 and 2008. It examines the evolution of workers' distributive and interactional justice perceptions and assesses their degree of stability or change. Also, it identifies the most stable antecedents and outcomes of these organizational justice dimensions.

#### **Design/Methodology**

Data were collected through a repeated cross-sectional design. Of the total of 935 partici-

pants, 334 were surveyed in 2000, 259 participated in 2004, and 285 participated in 2008.

#### **Results**

Results show that distributive justice perceptions are more stable than interactional justice perceptions. Organizational support is the most stable predictor of distributive justice, and quality of supervisor practices is the most stable predictor of interactional justice. Unlike expected, interactional justice appears to have a stronger relationship, than distributive justice, to workers' attitudes directed both at the organizational system, and at the supervisor and immediate work context. So, findings offer mix support to justice models based on social exchange theory, such as the agent-system justice model.

#### **Limitations**

Data was collected through self-report raising questions regarding common method bias

#### **Research/Practical Implications**

This study demonstrates that justice perceptions have a continued impact on workers' attitudes and satisfaction. In order to promote positive work attitudes, both the organizational system and its agents must ensure positive social relationships with employees.

#### **Originality/Value**

This analysis focuses on the justice dimensions less studied over time. Distributive and interactional organizational justice perceptions were studied over an eight years period, thus contributing to the clarification of their development, evolution, and consequences.

### **Person-organization fit: effects of pay justice on employee organizational commitment, job satisfaction and intention to remain in the organization**

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### Purpose

The notion of person-organization fit (P-O fit) is concerned with identifying the antecedents and consequences of compatibility between employees and the organizations in which they work. Research on correlates of P-O fit has demonstrated significant relationships with various individual outcomes such as organizational commitment, job satisfaction and intention to remain with the organization. Using the P-O fit framework and organizational justice theory, this study tests the assumption that value congruence between the employee and the organization regarding pay justice benefits employees organizational commitment, job satisfaction and intention to remain in the organization.

### Design/Methodology

A sample of 2534 teachers and 120 school managers in Stockholm was selected for a web-based survey. Questionnaires were sent to the teachers' and managers' e-mail addresses at their workplaces, accompanied by a cover letter explaining the general objectives of the research. The data collection is still ongoing.

### Results

The preliminary results indicate that P-O fit scores for pay justice have a direct effect on employees' organizational commitment, job satisfaction and intention to remain with the organization.

### Limitations

The present findings should be replicated among other occupational groups. The use of only self-reported measures may have led to some relationships being overestimated. We also acknowledge that the cross-sectional design prohibits us from making causal inferences.

### Research/Practical Implications

If employees are accepting and find the reasoning underlying pay decisions to be ade-

quate, it could contribute to more positive perceptions of pay justice – and just perhaps a better working climate.

### Originality/Value

Traditional justice research has only examined pay justice from the employees' perspective, this study incorporates the P-O fit framework.

### **The relationship between job insecurity and employee attitudes: The moderating role of overall justice**

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### Purpose

Existing research shows that organizational justice perceptions mitigates the negative effects of job insecurity on employees' attitudes and behaviours (e.g. Silla et al., 2010). These studies rely on Uncertainty Management Theory (Lind and Van den Bos, 2002) which suggests that employees use fairness information to manage uncertainty; consequently fairness becomes more important for employees when they experience job insecurity. However, taking into account the multidimensional nature of job insecurity (e.g. Ashford et al., 1989), it is unclear which justice information in particular will guide employees' reactions in times of job insecurity. Building on Fairness Heuristic (Lind, 2001) and Uncertainty Management Theories we hypothesize that it is overall sense of fairness, i.e. overall justice that moderates the relationship between job insecurity and employees attitudes (satisfaction and commitment). Hence, we expect high job insecurity and low overall justice to be related to low satisfaction and commitment among employees, while high overall justice should attenuate the negative effects of job insecurity on satisfaction and commitment.

**Design/Methodology**

To test our assumptions 220 employees in Lithuania were surveyed.

**Results**

The moderation analysis partly supports our hypothesis.

**Limitations**

It remains to be tested whether overall justice judgements moderates the relationships between job insecurity and behavioural reactions.

**Research/Practical Implications**

The study confirms the role of perceived overall justice in mitigating the detrimental effects of job insecurity on employee's attitudes towards work and organization.

**Originality/Value**

This is the first study to provide evidence on the moderating role of overall fairness judgement.

### **Dimensionality of organizational justice in Chinese university environment**

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**Purpose**

Colquitt (2001) carried out studies on the dimensionality of organizational justice. The results suggested that organizational justice was best conceptualized as four distinct dimensions: procedural justice, distributive justice, interpersonal justice, and informational justice. Although many researchers have debated this four factors structure

The purpose of this research is to check the adequacy of the measurement model for Organizational Justice in Chinese university environment

**Design/Methodology**

The participants were 435 university's teachers who filled the Organizational Justice Questionnaire by Colquitt (2001)

To assess the measure's factor structure, confirmatory factor analyses (CFA) using the maximum likelihood method was run. .

**Results**

The results of the estimation of the three-factor organizational justice model yielded a good fit between the model and data (Relative chi-square value ( $\chi^2/d.f.$ ) of 2.75; RMSEA=.063 $\leq$ 0.08; GFI=.91 $\geq$ 0.8 ; AGFI=.88 $\geq$ 0.8; CFI=.95 $\geq$ 0.9;NFI=.92 $\geq$ 0.9; AIC=544.78. All the indexes indicated the three-factor organizational justice model was better fit to the data than the four-factor organizational justice model.

The results showed that the items of the two subscales, informational and interpersonal justice loaded together onto a single one factor, rather than two independent factors. Given the introduction of informational and interpersonal justice was originally by means of further subdividing interactional justice into two additional justice types, we called this factor "interactional justice".

### **Individualized pay and justice perceptions: The importance of pay-related factors and leadership characteristics**

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**Purpose**

Individualized pay has become a frequently used characteristic of organizations in the private as well as the public sector. Although the literature emphasizes that employee perceptions of justice of the pay-setting process is necessary for individualized pay to have motivational effects, comparatively few studies

have investigated how such justice perceptions may be formed. The aim of the present study is to contribute to the understanding of the determinants of pay justice, by focusing on a range of pay-related factors (e.g., pay level, participation in performance reviews, knowledge about pay criteria) and leadership characteristics (e.g., feedback, goal clarity). Pay-related fairness is conceptualized in terms of distributive, procedural, informational, and interpersonal justice.

#### Design/Methodology

An on-line questionnaire is currently being administered to 2100 school teachers in Stockholm, Sweden.

#### Results

The survey data will be used to investigate the relative importance of pay-related factors and leadership characteristics for perceptions of pay justice.

#### Limitations

Although the cross-sectional nature of the data prohibits causal inferences, the study will provide preliminary understanding of the importance of pay-related factors and leadership characteristics for perceptions of pay justice.

#### Research/Practical Implications

By identifying how pay justice perceptions may be formed by pay-related factors and leadership characteristics, the study will have important implications for management practices in connection with the implementation of pay-for-performance systems.

#### Originality/Value

Justice can be considered an important goal in itself, given that a prerequisite for the success of any pay system is that it is perceived as fair. The study adds to the literature by identifying how such justice perceptions may be formed.

### **Relationship between perceived organizational justice and fidelity to psychological contract with organizational citizenship behavior**

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#### Purpose

The main purpose of this research was to study perceived organizational justice and fidelity to psychological contract with organizational citizenship behavior.

#### Design/Methodology

Research method was descriptive correlational and statistical population included all employees of a porcelain factory in Iran, out of them 280 subjects, were randomly selected via stratified random sampling method and three questionnaires consisting of organizational citizenship behavior, organizational justice and psychological contracts were used. Data were analyzed with use of Pearson correlation coefficient, simultaneous and stepwise regression analysis.

#### Results

Result indicated that there were significant relationship between components of perceived organizational justice (distributive, procedural, relational) and fidelity to psychological contracts dimensions' (transactional and relational ) with organizational citizenship behavior towards individual and organization ( $P \leq 0.01$ ). Moreover, the results of the regression analysis showed that fidelity to transactional psychological contracts, distributive justice and relational justice could predict 46% of organizational citizenship behavior. Furthermore, distributive and relational justice were significant predictors for fidelity to psychological contracts ( $P \leq 0.01$ ).



### Limitations

This study has some limitations such as, was based on self reports and is cross-sectional nature which prevents drawing causal conclusions and conducted in porcelain factory which affects generalizability of our findings, thus should be replicated in other settings.

### Research/Practical Implications

With these findings, this study hopes to help practitioners and scientists in Industrial and Organizational psychology field.

### Originality/Value

This research as a first study in topic of fidelity to psychological contract in Iran, confirms that perceived organizational justice and fidelity to psychological contracts are important predictors of organizational citizenship behaviors.

## **Transformational and transactional leadership styles as predictors of organizational commitment: the mediating role of justice perceptions and job satisfaction**

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### Purpose

This study was conducted to explore the causal relationships between different leadership styles, justice perceptions, job satisfaction and organizational commitment.

### Design/Methodology

Data was collected from 537 participants recruited from different organizations. The path analysis was used to analyze the relationships between given variables in the causal model.

### Results

The results have indicated that transactional leadership style has positive indirect effect on organizational commitment through organizational justice perceptions and job satisfaction, while transformational leadership style has

both positive, direct and indirect effect on organizational commitment. Employees job satisfaction depends directly on the level of organizational justice being perceived by the employees. Job satisfaction also significantly contributes to organizational commitment.

### Limitations

Better understanding of the relations among different types of organizational justice, facets of job satisfaction and organizational commitment factors are essential for organizational justice research. This study provides initial evidence about their causal relations. In further research, consideration should be given to clarify the effects of a different types of organizational justice (distributive, procedural and interactional) and facets of job satisfaction (job itself, pay, promotion, supervision and coworkers) as predictors of the certain aspects of organizational commitment (affective, continuance and normative), as well as mediators of the relation of leadership styles and organizational commitment.

### Research/Practical Implications

Implications of the results for human resource management and organizational development are discussed.

### Originality/Value

Current study clarifies the role of both, justice perceptions and job satisfaction as mediators for the relationship between transformational and transactional leadership and organizational commitment.

## **A new insight on the relationship between organizational identification and affective commitment**

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**Purpose**

Organizational identification (OI) and affective commitment (AC) are distinct, although strongly related, constructs. Despite the attention OI and AC have received, there is still disagreement regarding how they are related. Indeed, little attention has been given to the direction of causality between these two constructs, the role of one concept in the development of the other, or the behavioral consequences of the OI–AC relationship. This research was designed to fill these gaps.

**Design/Methodology**

We conducted three studies in order to investigate (a) the cross-lagged relationship between OI and AC, (b) the role of OI in the relationship between AC and three of its antecedents, and (c) how OI and AC relate to actual turnover. Data were gathered through questionnaires composed of widely-validated scales administered to samples of 695, 4739, and 1012 employees, respectively.

**Results**

Results of Study 1 indicated that OI is an antecedent of AC, and not the reverse. In Study 2, OI was found to partially mediate the influence of perceived organizational support, leader-member exchange, and job autonomy on AC. Finally, Study 3 indicated that AC totally mediates the relationship between OI and turnover.

**Limitations**

This research was conducted in Belgium and should be replicated in other countries.

**Research/Practical Implications**

These results suggest that strongly identified employees are more strongly attached to their organization, and consequently less willing to quit the organization.

**Originality/Value**

This research is the first to investigate the causality of the OI–AC relationship and to ex-

amine simultaneously how OI and AC relate to some of their common antecedents and consequences.

### **The impact of perceived organizational support on employees' well-being and performance: The role of self-efficacy and work engagement**

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**Purpose**

Numerous studies have shown that perceived organizational support (POS) (i.e., employees' beliefs concerning the extent to which their organization values their contributions and cares about their well-being) has positive consequences for both employees and organizations (Eisenberger & Stinglhamber, 2011). Surprisingly, only a few empirical studies have examined the influence of POS on self-efficacy and work engagement to predict employees' well-being and performance. Filling this gap, we hypothesized that (a) self-efficacy mediates the positive relationship between POS and work engagement, whereas (b) work engagement mediates the positive effects of self-efficacy on job satisfaction and extra-role performance and its negative influence on psychological strains.

**Design/Methodology**

We surveyed employees from two private companies (N = 265 and N = 112). We used an online questionnaire composed of validated and well-known scales. Furthermore, supervisors were asked to evaluate their subordinates' extra-role performance.

**Results**

Results of SEM and bootstrap provided support for all our hypotheses

### Limitations

Future research with repeated measures is needed in order to test the causality of the relationships among variables.

### Research/Practical Implications

The findings suggest that employees who feel more supported by their organization have a stronger self-efficacy which in turn enhances their work engagement. Furthermore, our results indicated that work engagement, increased by self-efficacy, has a positive impact on employees' well-being and extra-role performance.

### Originality/Value

This study contributes to the development of organizational support theory (Eisenberger et al., 1986). Indeed, it is the first research which associates POS with self-efficacy and work engagement in order to explain positive consequences of POS for both employees and organizations.

## **Committed to whom? Unravelling how volunteer perceptions of their impact on beneficiaries of volunteering influences their intention to stay and hours volunteered**

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### Purpose

This study presents a framework for understanding the processes through which volunteers' perceived impact on the beneficiaries of their volunteering influences their intention to remain with their organization and the time they dedicate to volunteering. We test a path model that shows that volunteers who perceive that their work impacts beneficiaries (1) report higher intentions to remain volunteering due to their commitment to the organiza-

tion; and (2) dedicate more time to volunteering because they are more committed to the beneficiaries of their work. Moreover, we examine whether the perception that one's volunteering work impacts beneficiaries strengthens the relationship between the mediators and the dependent variables.

### Design/Methodology

We employed data (N = 598) from a survey conducted at an international aid and development agency in the United Kingdom.

### Results

Analyses conducted with MODMED and PROCESS macros for SPSS supported our hypotheses, though perceptions of beneficiary impact did not moderate the relationship between commitment to beneficiaries and volunteer time.

### Limitations

Cross-sectional self-report data were used; this limits inferences with regard to causality and raises concerns regarding common method variance.

### Research/Practical Implications

Volunteer organizations should demonstrate to volunteers their impact on beneficiaries. Surprisingly few studies have examined this variable, and none, to our knowledge, have examined it in relation to turnover intentions and volunteer time.

### Originality/Value

That volunteers may be committed to both their organization and the beneficiaries of their actions has yet to be fully examined in the literature. The present study uncovers two different mechanisms that explain how the positive consequences of perceived impact on beneficiaries may unfold.

### **Developing a region specific cultural database: Integrating multiple data collection methods**

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#### **Purpose**

As part of a grant funded by the U.S. Department of Defense, we were tasked with building a regional specific cultural database comprised of both declarative knowledge (e.g. economy, resources, style of government, religion) and cultural norms (e.g. social etiquette and concept of space and time) of 12 countries/regions. In addition, we collected qualitative data from cultural subject matter experts who were born and raised in the region. The poster session will discuss how to best integrate divergent sources of information into a cultural database that can be used to develop culturally accurate training scenarios. Best practices will be suggested and a set of recommendations for cultural database development will be presented.

#### **Design/Methodology**

72 white papers/briefs were developed, covering 12 countries/regions. Qualitative data will be collected from a possible sample of 338 international students (Saudi Arabia, United Arab Emirates, Iraq, Iran, Bahrain, Pakistan, Afghanistan, Syria, Qatar, Kuwait, and Yemen) from a South Eastern Private University in the U.S.

#### **Results**

Cultural SMEs rated the accuracy of cultural dilemmas developed from the white papers. The degree of accuracy varied considerably.

#### **Limitations**

We used students enrolled in a U.S. college as cultural SMEs. Both sampling bias and cultural assimilation may have biased findings.

#### **Research/Practical Implications**

Organizations developing knowledge management systems to capture cultural knowledge may improve their practice if a set of best practices are available.

#### **Originality/Value**

This paper will suggest a set of best practices to integrate sources of data when developing cultural assimilator exercises.

### **Motivators and deterrents of UN expatriate peacekeepers: Development and testing of a comprehensive model**

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#### **Purpose**

The research focused on United Nations (UN) expatriate peacekeepers (i.e., non-locals performing civilian jobs in UN peacekeeping missions), and constructed a comprehensive model to predict their motivation towards various issues (e.g., to continue in the current mission). UN peacekeepers are a hybrid type of expatriate: they have the support of the UN (a characteristic of corporate-sponsored expatriates), but on the other hand they must apply anew for participation to each new mission without guarantee of success (a feature that resembles more self-initiated expatriation). Further, in contrast to other expatriates, UN peacekeepers face substantial physical danger and serious emotional strain.

#### **Design/Methodology**

Participants were 155 UN expatriate peacekeepers from all 16 locations the UN currently maintains peacekeeping operations.

### Results

The structural model included a large number of variables; hence, the results cannot be presented in their totality. Nevertheless, as an indication, agreeableness was positively related to motivation to continue in the current mission through its relationship with commitment to the local population. And that was over and above concerns for own personal safety. Further, commitment to the UN and role ambiguity, via the burnout dimension of depersonalization, contributed to motivation to apply for another mission.

### Limitations

The study was cross-sectional. However, longitudinal data are also in the process of collection.

### Research/Practical Implications

The personality of UN expatriate peacekeepers is important, but concerns for physical safety, role ambiguity and expatriate adjustment also play key roles.

### Originality/Value

The study developed a comprehensive model to understand motivation of UN expatriate peacekeepers, an important and distinctive group on whom research is limited.

## **Slippery slope model in organizations: Trust and power influencing cooperative behaviour**

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### Purpose

The aim was to test the Slippery Slope Model (SSM) in the organizational context. Originally, the SSM describes in the tax context how power and trust influence cooperative behaviour. It was shown that taxpayers trusting the tax authority are willing to cooperate and to pay taxes on a voluntary basis. However,

when distrust is prevalent, taxes have to be enforced by control and sanctions. Cooperative behaviour in organizations can also be seen as twofold since there are two ways to fulfil a task. One can stick tightly to job descriptions or one can cooperate beyond that and show extra-role behaviour.

### Design/Methodology

A questionnaire was used in different profit and non-profit-organizations. In total 1146 valid data sets were collected. It was aimed to show the relations at distinctive organizations varying in respect to culture, size, location and branch.

### Results

Results are analyzed with multi-group structural equation modeling using *mplus*.

### Limitations

Measures of cooperative behavior are self-reported. As the survey was conducted via the organizations, it is always questionable whether the responses concerning such a sensible topic are totally honest.

### Research/Practical Implications

Cooperation of employees is an important topic since an organization's economic success depends heavily on the engagement of its employees.

### Originality/Value

The SSM has not been tested yet in organizations.

## **Tracing work values among 16 years old students**

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### Purpose

This paper presents research among Norwegian 16 year old students facing choices

among different streams in higher education, including streams leading to apprenticeship in the hospitality industries. The study investigates stability and change in work values, and intentions regarding work in this industry.

#### Design/Methodology

Data were collected by questionnaires during school hours in 2002 and 2011 (n=1863 and 1839, respectively), and analysed in SPSS.

#### Results

Data show clear decline in future interest in work in the hospitality industries (operationalized as 11 work positions) between 2002 and 2011. The decline is larger and different for the females compared to the males. Data further show stability over time in work values, the five ranked highest also show stability across gender.

The value structure as shown by factor analysis, differ to some extent across gender and time. The first factor ("Youthful, diverse and action") for the 2011 samples of both males and females were almost similar, but differed from the 2002 samples. These differed from each other ("Home sweet home" for males and "Work travel" for females). Paradoxically the first factor of each sample correlated with some of the work positions, especially in the 2011 samples.

#### Limitations

The work values reported might be loosely grounded in work experiences and hence lack realism.

#### Research/Practical Implications

The hospitality industries might need to develop their work places and image, and communicate themselves more clearly as work options, and in accordance with the observed work values.

Supplementary research methods might be advantageous.

#### Originality/Value

This subject is under-researched in the hospitality and tourism context.

### **Workaholism as the dark side of high organizational commitment**

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#### Purpose

Highly committed workers are more satisfied with their work, more likely to manifest extra-role behaviors, less prone to absenteeism and turnover. It is beneficial to the organization, making it more competitive. However, the dark side of high affective organizational commitment is excessive preoccupation with work, stress and tension in social and family relationship, limited time and energy for non-work organizations. Hypothesis: The higher the level of organizational commitment, the higher extent of symptoms of workaholism.

#### Design/Methodology

To test these assumptions, we conduct the research, which consist of 2 phases: 1) translating into Russian and examining the psychometric properties of the Dutch Work Addiction Scale (DUWAS) (N = 60), 2) analysis of relationship between organizational commitment and dimensions of workaholism.

#### Results

Confirmatory factor analysis revealed that the 2-factor model (Working Excessively (WkE) and Working Compulsively (WkC)) fit to the data ( $\chi^2=224.075$  ( $p= 0.0034$ ), CFI = 0.929, RMSEA = 0.073),  $\alpha$  (WkE) = 0.793,  $\alpha$  (WkC) = 0.711.

Workaholism correlated with affective commitment and normative commitment (0.569 and 0.204, respectively).

### Limitations

Examining the psychometric properties of the DUWAS was conducted on a small sample. Low correlation indicate an indirect relationship between workaholism and organizational commitment.

### Research/Practical Implications

These results imply that overcommitment has a negative consequences.

### Originality/Value

In the study we first used the Russian version DUWAS. To our knowledge it was first analysis or relationship between organizational commitment and dimensions of workaholism.

## Normative commitment orientation: Obligation across domains

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### Purpose

Organizational commitment (OC) refers to attitudes that result in one remaining with an organization (Mowday, Steers, & Porter, 1979), and consists of three types: affective, normative, and continuance (Meyer & Allen, 1984). Although normative commitment (NC) is typically focused on a sense of obligation toward an organization, based on theories of socialization and reciprocation (Meyer, Allen & Smith, 1993), we propose that normative commitment may be an orientation that is prevalent in across domains. Thus, we examine the idea of Normative Commitment Orientation (NCO), a tendency to feel obligated to remain faithful and loyal not only to the organization, but to friends, family, and romantic partners.

### Design/Methodology

We sampled 521 full-time and part-time workers who were undergraduate stu-

dents. We utilized the Meyer and Allen (1990) Normative Commitment Scale, and items based on this scale that referenced other domains (e.g., family, relationships).

### Results

Confirmatory factor analyses revealed that a single factor model of normative commitment across a variety of domains was a better fit than a multidimensional model of normative commitment.

### Limitations

As this is a construct under development, additional analysis (e.g., construct validity, convergent validity) should be conducted to better understand the impact of this new construct.

### Research/Practical Implications

Understanding the underlying genesis of normative commitment adds to the literature on OC. Specifically, it provides researchers of work psychology and social psychology a new perspective of why some individuals remain in undesirable circumstances.

### Originality/Value

We introduce a novel approach to OC, and specifically NC, by looking at it as an orientation, and demonstrate its existence across interpersonal domains.

## Innovation-related self-efficacy: Introducing the construct and development of a measuring instrument

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### Purpose

According to Bandura's concept of self-efficacy, innovation-related self-efficacy is defined as a person's belief in his or her ability to be innovative at work. In the context of our study we consider innovation as a multistage process consisting of a set of three different



tasks: the (1) generation, (2) promotion, and (3) implementation of ideas. According to this framework, the aim of our study is to develop an instrument to measure innovation-related efficacy-beliefs for these three behavioral tasks.

#### Design/Methodology

Based on an examination of the literature on self-efficacy and innovation we created an initial set of items reflecting employees' beliefs in their ability to be innovative at work. These items were discussed in an expert group. Subsequently, a large-scale survey with undergraduated students and a smaller sample of employees was conducted to test the adapted item pool.

#### Results

Results of the confirmatory factor analyses and the final scale of innovation-related self-efficacy will be presented.

#### Limitations

Our study was conducted with only two samples of students and employees respectively. Thus, generalizability is limited.

#### Research/Practical Implications

The scale may be useful for future research, especially concerning the examination of the impact innovation-related efficacy beliefs may have on innovative work behavior.

#### Originality/Value

Previous work has concentrated on creative self-efficacy tapping only the idea generation stage of the innovation process. However, for a full understanding of innovation at the personnel level, self-efficacy beliefs should also concern the other stages. With our research we contribute to the underlying process of individual's innovative work behavior.

### **Stability of work attitudes: A 5-year longitudinal study on job involvement and effort expenditure at work**

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#### Purpose

Work attitudes and work motivation are among the most exploited concepts in work and organizational psychology, nevertheless, their dynamics are rarely addressed by empirical research. This study tries to shed light on the development of job involvement and effort expenditure over five year period. To account for their stability and possible changes, a wide range of personal characteristics, job characteristics, and organizational stimuli are studied.

#### Design/Methodology

Data come from a national representative sample of the employed population. The same subjects are followed 4 times over 5 year period in strictly longitudinal research design. Original sample is 1106 persons, with, respectively, 1000, 750, and 360 participating in each of the succeeding waves. The subjects come from different organizations.

#### Results

Comparisons are made between the changing and stable subjects as well as between those coming from changing and from stable organizations. Particular attention is paid to a group of subjects employed by organizations undergoing dramatic and persistent changes for a long period of time.

#### Limitations

The information is drawn from a self-assessment type questionnaire.

#### Research/Practical Implications

Data clearly show that organizations are likely to systematically overestimate the possibility to influence their employees.

**Originality/Value**

Longitudinal studies advance our knowledge beyond the chance-insensitive one-time empirical research and help to reconstruct a more holistic picture of work reality.

**The gendered nature of business meetings**

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**Purpose**

This study addressed how gender differences may play a role in business meetings. Although many working hours are spent in business meetings and the impact of decisions taken in meetings can be crucial, the research on gender differences in business meetings is virtually absent. I focused on the gender of the chairperson and the gender composition of the team members in the meeting.

**Design/Methodology**

723 respondents in the Netherlands responded to a survey on their experiences during the last meeting they attended. Meeting team size was on average 7.65, and the average duration of the meetings was 72 minutes.

**Results**

The gendered nature of the meetings was clear: on average 40% of the meeting participants were women, 31% of the chairpersons were female, and these were more likely to chair meetings that included women. Statistical analysis revealed no effects of the gender of the chairperson on participation, participative safety, satisfaction, efficiency, and effectiveness. However, women experienced significantly more participation in women majority meetings, and men experienced more participation in male majority meetings.

**Limitations**

Only meeting perceptions were investigated.

**Research/Practical Implications**

The findings on team gender composition have implications for distinctiveness theory: business meetings appear to trigger distinctive behaviors within a certain team composition. Meeting management techniques may be informed by these findings.

**Originality/Value**

The study is among the few to systematically investigate gender differences in the perceived outcomes of business meetings.

**The moderating role of need for affect in regard to the cognitive and affective underpinnings of job satisfaction**

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**Purpose**

Research has shown that job satisfaction is influenced by both cognitions about the job and affect experienced at work. However, social psychological research suggests that the extent to which attitudes are based on cognitive and affective information is contingent on stable individual differences, in particular need for affect (consisting of two subscales referring to approach and avoidance of emotions, respectively). Based on current conceptualizations of job satisfaction as an attitude toward the job, we hypothesized that job satisfaction should depend the more on affect and the less on cognitions the higher a person's need for affect.

**Design/Methodology**

To test our hypotheses, we conducted two online studies with 134 and 190 employees working in different organizations and occupations. Aside from need for affect and job satisfaction, we assessed the frequency of positive and negative emotions at work, and agreement to statements referring to different job facets.

### Results

In both studies, results of moderated multiple regression analyses were consistent with our hypotheses, in particular for the subscale motivation to approach emotions.

### Limitations

Given the present studies' cross-sectional correlational design, further longitudinal or experimental research should be conducted to establish the presumed causal relationship.

### Practical Implications

The results imply that the success of interventions to enhance job satisfaction aimed at changing affect or job cognitions may depend on employees' dispositions.

### Originality/Value

These studies are the first to show that persons differ in the extent to which their job satisfaction is based on affect and cognitions contingent on their motivation to approach emotions.

## A new generic model of individual workplace performance

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### Purpose

Individual workplace performance (IWP) is perhaps the most important criterion variable in Work/Organisational Psychology. Yet, knowledge pertaining to its conceptualisation and measurement lags behind. We propose a new behavioural, generic model to address this issue.

### Design/Methodology

Individuals' notions of performance were gathered through interviews (N=25). Subsequent expert categorisations of the constructs elicited enabled the development of a new model (11 categories). Based on this, a multi-

rater performance measure was developed and tested in two phases (pilot N=164; main N=206) to evaluate applicability in wider populations.

### Results

The pilot phase provided overall support for model and measure, but suggested a more parsimonious, six-factorial IWP structure, incorporating both positive and counterproductive behaviours. In the main phase, factor analyses suggested the correlational pattern observed in pilot phase data could be replicated, lending support to the six-factor structure's relevance across different samples. The associated measure's psychometric properties were adequate across both phases.

### Limitations

Thus far, the new model has been used predominantly with professional/managerial, Western European samples, suggesting further research should investigate its generic applicability across more varied occupational and cultural settings.

### Research/Practical Implications

The results indicate performance can be conceptualised and operationalised through six behavioural components, which can be employed in both research and practice.

### Originality/Value

We offer an innovative way of exploring and modelling a psychological construct, our research utilising repertory grid interviews and analysing the resulting data via a specific grid aggregation procedure. Further, unlike most other taxonomies, we conceptualise performance hierarchically in terms of both positive and counterproductive aspects.

### **Attitudes as Antecedents of Organizational Citizenship Behaviour of Lithuanian Employees**

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#### **Purpose**

The study aims to explore satisfaction with job characteristics and organizational commitment as individual level predictors of different types of organizational citizenship behaviours (OCB), to investigate whether each type of citizenship behaviour has distinct attitudinal antecedents and to analyze the moderating role of organizational commitment on the relationship between job satisfaction and citizenship behaviours. The Lithuanian version of organizational citizenship behaviour scales developed by Podsakoff et.al (1990) and based on Organ's (1988) five-dimension conceptualization of the OCB is prepared for the study. Williams and Anderson (1991) described two types of OCB: behaviours directed toward individuals (OCB-I) and toward the organization (OCB-O) and suggested that Organ's (1988) OCB dimensions altruism and courtesy comprise OCB-I and conscientiousness, civic virtue, and sportsmanship comprise OCB-O. In our study data is analysed in the frame of Organ's (1988) and Williams and Anderson (1991) OCB models and in relations with job satisfaction and organizational commitment.

#### **Design/Methodology**

250 Lithuanian employees participated in the study.

#### **Results**

Assumptions about different prediction patterns for citizenship behaviour dimensions and focus were partially confirmed, the moderating role of the commitment on the relationship between job satisfaction and forms of OCB was revealed.

#### **Limitations**

A more elaborate model (e.g. including organizational level antecedents) would be necessary to fully explain antecedents of different types of citizenship behaviours.

#### **Research/Practical Implications**

The role of employee job satisfaction and organizational commitment in OCB practice is discussed.

#### **Originality/Value**

This study presents the data on Lithuanian employee organizational citizenship behaviour, describes citizenship behaviour according to its focus rather than solely relying on its form.

### **Classic achievement motivation contrasting regulatory focus: Just "old wine in new bottles"?**

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#### **Purpose**

Since Higgins (1997) published his idea of two distinct motivational systems regulating goal-directed behavior, regulatory focus theory has virtually been launched into work and organizational research. The differentiation of a focus on positive outcomes (promotion) vs. on negative outcomes (prevention) has proved to account for various behavioral phenomena. However, one critical question has been repeatedly raised: What makes regulatory focus (RF) different from Atkinson's achievement motivation? The purpose of the present study is to empirically test Higgins' stance that the two constructs are not equivalent.

#### **Design/Methodology**

We obtained several measures of the RF as well as of explicit and implicit (PSE) achievement motivation from a sample of students (N = 63). We also assessed power motivation, affiliation motivation and neuroticism. Addi-

tional data were collected from a larger sample of students (N = 901).

#### Results

Regression analyses showed that the constructs only shared medium-sized proportions of variance. Moreover, fear of failure motivation was highly correlated to neuroticism, whereas prevention focus was not. SEM analyses revealed that prevention focus accounts for avoidance orientation of all other motive types. Regarding promotion focus we found similar however less consistent results.

#### Limitations

It remains to be tested, how both constructs interact as predictors of behavioral consequences.

#### Research/Practical Implications

Results provide strong evidence that RF is distinct from achievement motivation. This should encourage researchers to take the additional explanatory power of RF into account.

#### Originality/Value

To our knowledge, this is the first study empirically demonstrating the potentially 'revolutionary' value of RF as suggested by Higgins.

### **In whom I have to trust to be satisfied? Meta-analytic findings about the connection between trust across different hierarchical levels and job satisfaction**

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#### Purpose

Job satisfaction has many positive outcomes for organizations and is positive related to employees' well-being. For example Dirks and Ferrin (2002) explored that there is a significant correlation between trust in leaders and employees' job satisfaction. Beside trust in leaders organizational trust research also focusses on trust in peers and trust in top man-

agement. Until now, it is not explored if there are any differences between the levels of trust relationships and their impact on employees' job satisfaction.

#### Design/Methodology

I searched the Databases of Emerald and EbscoHost for trust and job satisfaction. Via a meta-analytic approach this research examines the existing studies which explore the correlation between horizontal respectively vertical trust relationship types and job satisfaction and interpret them towards the research question.

#### Results

The most important trust relationship types with regard to a positive effect on job satisfaction are trust in peers and trust in direct leaders.

#### Limitations

The studies used for meta-analysis differed in their quantity for each trust relationship type. Thus the results for each relationship type differ in their quality.

#### Research/Practical Implications

Supporting trust relationships is a necessary strategic objective for organizations. Study results help to identify on which type of trust relationships should be focused

#### Originality/Value

The unique contribution of this study is the insight which type of trust relationship is the most important to improve job satisfaction in organizations.

### **The prediction of dynamic criteria on maintenance stage using Generalized Maximum Entropy formulation**

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Despite several controversies, empirical evidence supports that criteria (i.e. performance and effectiveness) are dynamic, which has direct implications on personnel decisions. The most outstanding theoretical model was developed by Murphy (1989) and proposes that workers alternate between 'transition stage', where workers are performing unfamiliar tasks, and 'maintenance stage', where workers are performing well-learned tasks. This study is aimed to analyze prediction of criteria over time and the prediction of their fluctuations on maintenance stage.

Participants were 34 basketball players. Self-report was used to measure predictors (Big Five personality, experience and motivation, the latter in three different times) while effectiveness was obtained from objective data. Analysis were performed with Generalized Maximum Entropy formulation (GME), which takes advantage from the information available to make conclusions from limited data (e.g. scarce sample sizes).

Predictors weight changes over time in the prediction of criteria; Big Five personality factors, experience and motivation are predictors of fluctuations on criteria; Experience has lower relevance than personality and motivation.

The main limitation is that we only analyze three times and this prevent the description of patterns in fluctuations over time, but is enough to show that criteria and their fluctuations have the same predictors but with different weights.

Managers should take fluctuations into account, and that although experience ever contributes to effectiveness, motivated and conscientious players reach better results.

This study shows that criteria and their fluctuations are related but different phenomena. Additionally, our study takes Motivation into

account, a variable forgotten in dynamic criteria despite Murphy (1989) claim their relevance on maintenance stage.

### **What impedes flow in power situations? The role of competing explicit motives.**

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Hugo M. Kehr (TU München, DE)*

#### **Purpose**

Recent studies have proved that activating implicit motives leads to flow. In accordance to the compensatory model of work motivation and volition (Kehr, 2004) competing explicit motives can impede this mechanism. The aim of the present study is to test the obstructive effect of competing explicit motives for flow experience. In contrast the absence of competing explicit motives or the congruence of implicit and explicit motives should sustain the experience of flow.

#### **Design/Methodology**

First the implicit power motive is induced. Then in three experimental conditions explicit motives are aroused: 1) The flow impeding explicit affiliation motive 2) The flow sustaining explicit power motive 3) No explicit motive.

#### **Results**

The results of our experiment are discussed with regard to the combined effects of implicit and explicit motives and the consequences for flow experience.

#### **Limitations**

The competing effect of incongruent explicit motives for flow experience is supposed to be validated for other motives.

#### **Research/Practical Implications**

Summing up, explicit motives play a leading role for the experience of flow that so far has not yet been considered sufficiently. The explicit motives in the present study are power and affiliation that both show high relevance



for leadership behavior. Consequently this research creates further knowledge for shaping leadership behavior even more efficiently.

#### Originality/Value

Until now research has primarily focused on the role of implicit motives for the experience of flow. For a more complete picture the present research additionally includes explicit motives that not least can be addressed and regulated more directly not only in research but also in real life.

### **Aligning between the values of Brazilian industry workers of software and IT services and management strategies of organization**

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#### Purpose

Values are the principles that drive individuals and are related to fundamental aspects of life. The need to combine knowledge about work values while connecting these values to the organization's strategy is one of the challenges of knowledge management. In an attempt to to minimize this gap, this research sought to map the work values of Software and IT Services Industry professionals of by the Work Values Scale.

#### Design/Methodology

The survey instrument was the Work Values Scale, widely used in Brazil. The scale was applied by online questionnaire to select social networks, and gave a return of 297 participants from the software and IT Services Industry from several Brazilian states.

#### Results

The results of the Factor Analysis confirmed in part the structure of the scale, Factor 3 – "Prestige" and Factor 1 – "Work achievements" did not keep the original structure. The Regression Analysis indicated that work

values were associated mostly to aspects related to age. The association between the Independent Variables (age, sex, education, occupation and job time) and the factors is weak. Regarding Factor 1 "Work achievements", the variables represented 1.4% of variance. For Factor 2 – "Social Relationships", represented 3.5%. For Factor 3 – "Prestige", 3.1%. For Factor 4 – "Stability", variables accounted for 0.5% of the variance.

#### Limitations

Sample not probabilistic. It is suggested that future studies use probability samples.

#### Research/Practical Implications

To map work values to provide alignment with organizational strategies of knowledge management.

#### Originality/Value

Knowledge Management, Organization's strategy

### **Empowerment of teaching and non-teaching at university: A cross-cultural study**

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#### Purpose

Empowerment has been the focus of many studies, but few of them have explored the phenomenon cross-culturally. The aim of this study is to explore, according to the models of structural (Laschinger, Finegan, Shamian, & Will, 2001) and psychological empowerment (Spreitzer, 1995), the phenomenon of empowerment cross-culturally by comparing the situations in which teaching and non-teaching employees from Portugal and Spain experienced structural and psychological empowerment at university context.

**Design/Methodology**

A cross sectional study using questionnaires was conducted. The sample consisted of 440 university employees (60.8% females; Mage = 44.23; SD = 8.57) from a Portuguese (230 employees) and Spanish (210 employees) public universities. Researchers have distributed and collected the paper-and-pencil questionnaires.

**Results**

Portuguese and Spanish university employees' perceptions of structural and psychological empowerment are similar. In relation to professional activity (teaching vs. non-teaching), results indicated significant ( $p < .01$ ) higher levels of psychological (meaning, competence, and self-determination) and structural empowerment (opportunity) in Portuguese teachers, and significant ( $p < .01$ ) higher levels of psychological (meaning, self-determination, and impact) and structural empowerment (opportunity, information and formal power) in Spanish teachers.

**Limitations**

It is necessary to expand upon and test the nomological network of structural and psychological empowerment in other international and work contexts.

**Research/Practical Implications**

University employees in these countries are exposed to different work and cultural environments, but their experiences of both structural and psychological empowerment are similar.

**Originality/Value**

University employees' empowerment may transcend cultural contexts, although work conditions may be important for the employees' empowerment.

**Promotion focus and group goals reduce biases in group decision making**

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**Purpose**

Decisions in organizations are frequently made by groups with the intention to profit from combined expertise. Unfortunately, group performance suffers from individuals' tendency to discount opinion-inconsistent and to favor opinion-consistent information. The present research sought to identify factors that reduce this so-called confirmation bias and, ultimately, help to create conditions that improve group performance. To be more precise, we predicted that group members with individual goals in a prevention focus show a stronger confirmation bias during group decision making compared to group members in a promotion focus and group members with group goals, irrespective of the focus.

**Design/Methodology**

In three experiments, participants read a group discussion protocol or discussed via e-mail with programmed others. The individual goal was to make a good impression or to know the correct decision after discussing, whereas the group goal in all the experiments was to perform well as a group.

**Results**

Participants striving for individual goals in a prevention focus (compared to all other conditions) showed a stronger confirmation bias, which led to less memory for new information and to lower decision quality.

**Limitations**

Further evidence showing that the results generalize to actual groups is needed (and in progress).

#### Research/Practical Implications

Factors such as (economic) threat eliciting a prevention focus endanger group decision quality when members pursue individual goals.

#### Originality/Value

The contribution of individual level motivational processes and cognitive biases in the context of group decision making allows for developing individual level interventions that are likely to contribute to group and organizational performance.

### **The salience of everyday rewards and motivation: A workplace diary study based on Self-determination Theory**

Rebecca Hewett (Royal Holloway, Univ. of London, UK) [bex.hewett@yahoo.com](mailto:bex.hewett@yahoo.com)

#### Purpose

Self-determination theory has suggested that some rewards can be detrimental to positive motivational experience. There is considerable disagreement about the nature of this relationship in the workplace. This quantitative diary study examines task focused everyday rewards and motivation. It tests the hypothesis that more salient rewards will be detrimental to more autonomous forms of motivation. It also explores the impact of job and task context on this relationship.

#### Design/Methodology

Following a pre-diary survey, 64 respondents in a UK public corporation completed 399 diary entries across a two-week period. Respondents reported 'reward, recognition or feedback' in relation to highly motivated tasks.

#### Results

Very few instances of financial reward were reported, most took the form of verbal or written feedback. Multi-level modelling confirmed that more salient reward is detrimental

to intrinsic motivation, but only for more complex jobs and in the absence of manager support for autonomy.

#### Limitations

All data were collected through self-report scales so single method bias is a risk.

#### Research/Practical Implications

Financial rewards played little part in task motivation, suggesting the importance of examining non-tangible rewards in relation to work tasks. It suggests the conditions under which reward can be detrimental to intrinsic motivation. It answers and raises some questions about SDT as a theory of work motivation.

#### Originality/Value

This study bridges previous experimental research and contradictory findings in the field, to identify the conditions under which rewards can be detrimental to more positive motivational experience. Reward salience is a neglected stream of research in applied psychology.

### **Effects of economic uncertainty, job insecurity and organizational aspects on the intention to quit**

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#### Purpose

In times of economic uncertainty, many organizations have to use different strategies to reduce costs, increase efficiency and ensure competitiveness. Organizational restructuring and downsizing often lead to feelings of job insecurity and therefore decreased employee's trust and a higher intention to quit. In our study, we examine the impact of economic uncertainty and job insecurity on the intention to quit and analyze the effects of various organizational aspects.

**Design/Methodology**

566 Austrian workers participated in a comprehensive online-study. Job insecurity and recent/future economic uncertainty was measured with one item, respectively. The intention to quit consists of three items that measures different aspects of turnover intention. Next to job insecurity and economic uncertainty, different organizational aspects were measured.

**Results**

A multiple regression analysis revealed that organizational aspects (e.g. demanding of job, possibility of making a career, identification with organizational values) have a stronger impact on the intention to quit than perceptions of economic uncertainty or job insecurity.

**Limitations**

The aim of this study was to find predictors for the intention to quit. Next studies have to reveal, if these predictors show an influence on real turnover behavior as well.

**Research/Practical Implications**

These findings should help organizations to increase the commitment of their employees. In times of economic uncertainty, a strategy to improve employees' commitment is to positively change various organizational aspects.

**Originality/Value**

This research provides a foundation for both researchers and organizations to further explore the effects and interaction of organizational aspects and economic status.

**Trust as mediator between affective states and pro-social behaviour under inclusion vs. exclusion experiences**

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**Purpose**

The analysis of motivational determinants of pro-social behaviours seems to be relevant to promote the development of social networks that facilitate the coexistence and well-being in healthier social and organizational contexts.

**Design/Methodology**

In this study, an experimental design was applied to analyse the influence of hypersensitivity to social rejection, affective states, and trust on pro-social behaviour in the included versus excluded context. The research was performed in a Spanish University with a sample of 131 students.

**Results**

The results confirm (a) that socially excluded individuals are more pro-social than included individuals but only when they think that they might reconnect in the future; (b) that the hypersensitivity to social rejection-affective states link was moderated by the inclusion/exclusion experience; (c) that the mediation of trust between affective states and pro-social behaviour was moderated by the type of inclusion/exclusion experienced by the individual; and (d) partially supported a predictive model of pro-social behaviour moderated by the type of inclusion/exclusion.

**Research/Practical Implications**

Results indicates the relevance of promoting different variables in included individuals, excluded individuals that think that they might reconnect in the future, and excluded individuals that do not see this possibility

### Types of trust and team performance in inter-organizational teams

Simone Donati (Univ. of Bologna) [simone.donati@unibo.it](mailto:simone.donati@unibo.it), Salvatore Zappalà (Univ. of Bologna)

#### Purpose

Trust is defined as a "...psychological state comprising the intention to accept vulnerability based upon positive expectations of the intention or behaviors of another" (Rosseau et al., 1998). Inter-organizational trust is at stake when members that belong to different companies join to pursue shared goals, defined as "extent of trust placed in the partner organization by members of a focal organization" (Zaheer et al., 1998). Another level of trust is related to group and intergroup level (Currall & Inkpen, 2002). Costa & Anderson (2011) describe four trust facets: Propensity to trust, Perceived Trustworthiness, Cooperative Behaviours and Monitoring Behaviours. Finally, level of friendship between team's members also seem to affect trust, exchange of resources and team performance. Parise and Rollang (2010) demonstrated that pre-existing collaboration and friendship facilitated and improved group performance and productivity. Costa et al. (2009) observed that teams with higher prior social capital showed higher level of perceived trust than teams with lower social capital.

#### Design/Methodology

A questionnaire included team identification; trust in the team, inter-organizational trust and prior knowledge of the other partners (independent variables) and perceived team performance (team effectiveness and team efficiency) and team satisfaction and individual member commitment with the inter-organizational collaboration, as dependent variables.

#### Research/Practical Implications

This study investigates inter-organizational teams, composed by entrepreneurs and man-

agers of different companies that pursue together common goal/s. This type of teams offers a valuable context in which different kinds of trust (inter-organizational and team trust) may develop and impact team performance.

### How trust fosters information processing and learning in virtual teams. The role played by team feedback

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#### Purpose

Trust is an important factor for effectiveness in virtual teams. Based on the conceptualization of groups as processors of information, we studied the effect of a team intervention on team trust, group elaboration of information and team learning. We propose a moderated-indirect model such that relationship between team trust and team learning is mediated by group elaboration of information and relationship between team trust and team elaboration of information is moderated by team feedback.

#### Design/Methodology

A laboratory experiment was carried out with 54 four-person virtual teams working in a team feedback and in a control condition. Team feedback was implemented in two sessions of 3 hours, in which teams performed intellectual tasks. Teams received feedback that enabled them to discuss how to improve their results.

#### Results

Multiple regression results showed that team feedback moderated the relationship between team trust and group information elaboration. We also found that group information elaboration was positively related to team learning. Finally, our findings suggest that the media-

tion effect of elaboration of information depends on team feedback.

#### Limitations

Generalization of findings to the organizational setting is limited due to the participants were undergraduate students.

#### Research/Practical Implications

Team feedback can be an effective intervention for practitioners to increase the benefits of team trust on group information processes and consequently team learning perceptions in virtual team contexts.

#### Originality/Value

This paper contributes to extend the study of teams as information processors to the virtual context and highlights the role of trust and team feedback on team learning.

### **Reciprocity of trust in the supervisor–work-unit relationship**

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#### Purpose

This paper extends previous research on trust by testing the reciprocity of trust in the supervisor-work-unit relationship, rather than the relationship between the supervisor and each individual subordinate. Additionally, we test an antecedent (supervisor's perception of the service quality delivered by the work-unit) and an outcome (employees' collective burnout) to this reciprocal model of trust.

#### Design/Methodology

We test a structural equation model with data aggregated to the work-unit level of analysis. The sample was composed by 85 work-units,

representing 85 supervisors and 689 subordinates.

#### Results

As expected, work-units delivering high service quality were positively and significantly related to the trust the group as whole received from the supervisor. In turn, our results suggest that a shared perception of the trust that the work-unit has on the supervisor reciprocates the trust they received. Finally, work-units that trust their supervisor showed less collective burnout

#### Limitations

Despite having different informants, the main limitation of the study is due to its cross-sectional nature. Research/Practical Implications: Researchers and practitioners may focus not only on each individual relationship the supervisor has with their subordinates, but also on the aggregate – shared perceptions of the work-unit. Additionally, this study provides evidence of the importance of service quality as an antecedent and collective burnout as an outcome to this reciprocal model of trust. Originality/Value: This paper extends the reciprocity of trust in the supervisor-subordinate relationship to the next level: the supervisor-work-unit liaison. We do so by considering two informants (supervisors and subordinates), and while adding an antecedent and outcome to the model.



# 15. Organizational structure, culture and climate

## Invited Symposia

### New Trends and Approaches in Organizational Climate Research and Thinking

Session Chair: *Vicente Gonzalez-Roma (Idocaj. Univ. of Valencia) [vicente.glez-roma@uv.es](mailto:vicente.glez-roma@uv.es)*

#### State of the Art

Climate is a classic topic in organizational psychology. During the last decade, there has been a renewed interest on the topic, and a number of meta-analysis (Parker et al., 2003; Carr et al., 2003), reviews (Kuenzi & Schminke, 2009), and handbooks have been published (Ashkanasy et al., 2000, 2011; Cooper et al., 2001).

#### New Perspective/Contribution

The goal of this symposium is to contribute to this renewed interest in organizational climate by proposing new ways of thinking, analyzing and intervening on organizational climate. Benjamin Schneider will propose a new consideration of the major climate dimensions. Michael West will show how integrated research involving studies of culture and climate is necessary if we are to enable effective organizational change. Jose M. Peiro will summarize the knowledge accumulated up to now about climate and culture strength, and will also present ways in which research on culture and climate strength can conceptually and operationally converge and be theoretically

linked. Finally, Vicente Gonzalez-Roma and Ana Hernandez will propose a new climate concept (climate uniformity: the pattern of climate perceptions within a team), and will show how climate uniformity is related to work-unit states, processes and outcomes.

#### Conclusion and Implications for Research/Practice

The contributions introduced above have clear implications for future thinking, research and practice about organizational climate. These implications will be discussed with the audience.

### ***Presentations of the Symposium***

#### **Toward an Integrated View of Organizational Climate**

*Benjamin Schneider (CEB Valtera)*  
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I propose that organizational climate research has been quite narrow in the range of variables we simultaneously address as potential drivers of various kinds of outcome climates and the achievement of organizational priorities. I propose that the major dimensions for climate thinking and research should be a bundle of HR practices ("high performance work practices"), and the general management tactics and approaches adopted in organizations. These latter might be conceptualized via the Quinn & Rohrbaugh (1983) competing values framework and/or Schein's (1965) description of management philosophies (economic man, social man, self-actualizing man, complex man). As a package, these tactics define a climate for well-being/engagement for employees and this climate serves as a foundation on which companies may build climates appropriate for the achievement of organizational priorities. In addition, I propose that the measurement of organizational climate advance beyond the

assessment of policies, practices and procedures and behaviors that get rewarded, supported and expected to the measurement of the meaning of those so that the climate for [something] is directly assessed.

### **Culture and climate for high quality health care**

*Michael West (Lancaster Univ.)  
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This presentation explores the role of climate and culture in health care systems. It is argued that we need an understanding of both in order to understand how to change organizations to achieve desirable outcomes. Using data and illustrations from a national study of health care quality in the UK, the presentation will show how integrated research involving studies of culture and climate are necessary if we are to enable effective organizational change.

### **Shared perceptions and beliefs in organization: strength matters!**

*Jose M. Peiro (Univ. of Valencia)  
jose.m.peiro@uv.es, Vicente Gonzales-Roma (Univ. of Valencia)*

Organizational climate refers to employees' shared perceptions of the policies, procedures and practices that are rewarded, supported and expected in a given organizational environment. Organizational culture refers to a set of shared values, normative beliefs, and underlying assumptions that characterize organizations and shape the way of doing things inside them. The two conceptualizations include the term "shared", but the attention paid by organizational climate and culture researchers to this term has been quite different. In this presentation we first review the meaning of strength in the organizational culture and climate literatures and analyze empirical research conducted on culture and

climate strength. Then, we will summarize the knowledge accumulated up to now about these topics, pointing out the limitations, and suggesting lines for future research. We will also present ways in which research on culture and climate strength can conceptually and operationally converge and be theoretically linked. Finally, we will discuss the issues in which research on culture and climate strength may converge conceptually, methodologically, and theoretically.

### **Climate uniformity: its influence on team states, processes and outcomes**

*Vicente Gonzalez-Roma (Univ. of Valencia)  
vicente.glez-roma@uv.es, Ana Hernandez (Univ. of Valencia)*

Recent research has shown that climate strength (i.e., the degree of within-team agreement in climate perceptions) plays a moderator role in the relationship between team climate and team outcomes. This research points out that climate strength should be taken into account to describe and understand a team's climate. However, climate strength alone cannot provide a detailed description of a team's climate configuration. For instance, the same climate strength (e.g., variance) value can be associated with distinct distributions of individual climate scores within a team. Based on Dispersion Theory (Brown & Kozlowski, 1999) and emergence theory (Kozlowski & Klein, 2000) we propose a new climate concept: climate uniformity (the pattern of climate perceptions within a team). Then, using a sample composed of 141 bank branches and analyzing data collected at three time points, we showed that after controlling for aggregate team climate, climate strength and their interaction, climate uniformity was directly related to task conflict and intra-team communication quality, and indirectly related to team negative mood through task conflict.

Teams with non-uniform patterns tended to show higher levels of negative mood and task conflict, and lower levels of intra-team communication quality, than teams with uniform patterns. The relationship between climate uniformity and team performance was fully mediated by intra-team communication quality.

## Symposia

### Scratching more than just the Surface: Digging further into Organizational Culture and Team Error Handling

Session Chairs: *David Falco Passenier (VU Univ. Amsterdam) [d.f.passenier@vu.nl](mailto:d.f.passenier@vu.nl), Freek van Berkel (Infrastructural Department of Amsterdam) [F.van.berkel@ivv.amsterdam.nl](mailto:F.van.berkel@ivv.amsterdam.nl)*

#### State of the Art

There is a growing body of research about error culture and error handling in organizations. Prior research indicates that error culture influences whether people report errors, that organizations can benefit from learning from errors with small consequences but tend to learn more from severe than from benign error consequences, and that error culture is related to organizational performance and long-term survivability. Nonetheless, many questions remain to be answered. The main challenge current error research faces is to dig deeper and expand the understanding of error culture by making relationships with other known organizational topics more specific. This challenge spans across the topics of social identity, leadership, trust and safety.

#### New Perspective/Contribution

This symposium introduces a range of approaches to address the current research challenges. The organizational culture research presented here furthers our insights at the

forefront of error culture and error handling, applying a mixed methods approach, survey analysis, narrative analysis, ethnography and discourse analysis.

#### Conclusion and Implications for Research/Practice

Cultural approaches to error in organizations can contribute to various organizational work performance problems that intersect with the consequences of making errors and dealing with errors. A diversity of research approaches show promising results to further scientific knowledge well attuned to the issues people face in organizations.

### ***Presentations of the Symposium***

#### **Organizational culture and shared error handling: The error assumption framework**

*Cathy van Dyck (VU Univ. Amsterdam) [c.van.dyck@vu.nl](mailto:c.van.dyck@vu.nl)*

#### Purpose

Building on the premise that the deepest cultural layer - organizational assumptions - affect values, norm and behavior, we explore patterns of shared assumptions about errors and investigate how these error assumptions affect error handling in organizations.

#### Design/Methodology

We used a theory-generating approach combining two rounds of interviews and concluding with a quantitative scenario. A total of fifty-nine interviews were conducted in fourteen organizations. The validity of qualitative findings was tested in the scenario study.

#### Results

The qualitative data suggest that organizational error assumptions can be placed in a framework with two dimensions: tolerance and decisiveness. The qualitative data further show that constructive error handling is en-

dorsed by a shared frame of mind that is tolerant as well as decisive. The scenario study supports the induced framework and its predictive validity with regard to error handling.

#### Limitations

While two of the four quadrants of the framework are observed frequently, tolerant-decisive and intolerant-decisive are less common.

#### Research/Practical Implications

Most organizations have difficulty to constructively deal with, and learn from error. The current findings suggest that assumptions may be used as a stepping stone in overcoming barriers for learning.

#### Originality and relevance

The present study shows that the visible aspects of error culture – error handling – are led by shared organizational assumptions that guide people how to feel, think and act after error occurrence. This finding extends earlier research that focused on the role of error tolerance (not decisiveness).

### **In the eye of the beholder: The benefits of being perceived as a leader with an error mastery strategy**

*Nicoletta Dimitrova (VU Univ. Amsterdam)*  
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#### Purpose

Trust in the leaders and intrinsic motivation have previously been identified as predictors of organizational commitment and job satisfaction. Leaders perceived as applying an error mastery strategy (focused on learning from errors) are more trusted and motivate their followers more. But can leaders' perceived error mastery strategy affect work attitudes? We hypothesize that leaders judged by followers as having more of an error-mastery strategy will be trusted more and will inspire intrinsic motivation, which in turn would re-

sult in stronger organizational commitment and greater job satisfaction.

#### Design/Methodology

At time 1, 135 employees filled in a questionnaire measuring perceived error mastery of their leaders. At time 2 (2-3 weeks later) participants filled in the measures of trust, intrinsic and extrinsic motivation, organizational commitment and job satisfaction.

#### Results

Mediation analysis revealed that perceived error mastery of the leader was positively linked to organizational commitment and job satisfaction, and that this effect was mediated by trust and intrinsic motivation.

#### Limitations

The current paper measured the perceived error mastery and not leaders' actual behavior.

#### Research/Practical Implications

The findings extend our understanding of the effects of leaders' perceived error mastery strategy. To reap the benefits of increased trust, employee motivation, organizational commitment, and job satisfaction, organizations may want to hire or train leaders applying an error mastery strategy.

#### Originality/Value

To our knowledge, the current study is the first to empirically investigate the link between leaders' perceived error mastery strategy and work attitudes.

### **Social identity and error narratives of medical professionals**

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#### Purpose

Communication is essential to learning from errors. The impact of identity on error communication, however, is scarcely researched

although it can offer insight into the barriers to learning from errors. With Social Identity Theory (SIT) as our point of departure, we explore interrelations among professional identity and intergroup communication in the medical sector as to gain better understanding of how and why learning from errors among medical professionals is problematic.

#### Methodology

Five physicians, three residents and six nurses of one hospital department were interviewed, using the critical incident technique, rendering a total of 45 narratives outlining specific errors and (near) incidents.

#### Results

The narratives of physicians, residents, and nurses contained different discursive elements related to social identity, enforcing hierarchical and status differences between the professional groups. Specifically, residents and nurses used social creativity to enhance or protect their ingroup status, while doctors displayed their dominance through paternalism.

#### Limitations

Looking at actual communication between groups was not possible in the chosen research design. Also, because of the limited sample size, no generalizations to other settings can be made.

#### Research/Practical Implications

The finding that professional groups do reaffirm, protect and increase their group status and position relative to other groups in the hospital constitutes a potential threat to optimal learning from errors. Practitioners could make use of this knowledge by focusing on ways to weaken the professional barriers that still exist in abundance in hospitals.

#### Originality/value

This is the first study exploring in-depth the social identity of medical professionals as expressed in narratives of errors.

### **Assessment of situational awareness: Team resources brought in action to enhance patient safety at the ICU**

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#### Purpose

Situational Awareness (SA) relates to the team's ability to perceive and anticipate threats in the care for patients. The present paper describes the development of a questionnaire that measures this SA gradient in the context of healthcare. The Resulting questionnaire (SafeTeam) consists of two components: attitudes (SafeTeam A) and behavior (SafeTeam B).

#### Methodology

A first version of the SafeTeam questionnaire was used to select items that reflect different levels of the SA gradient. Staff of six Intensive Care Units filled out the questionnaire (N=368). The data were analyzed using Item Response Theory. To assess convergent validity we additionally administered validated questionnaires on error culture, patient safety culture, affective commitment and job satisfaction.

#### Results

A two component questionnaire was developed. SafeTeamA scores show low to moderate correlations with error culture and affective commitment. SafeTeamB scores show moderate to substantial correlations with error culture, patient safety culture, affective commitment and job satisfaction.

#### Limitations

As patient outcomes are not included (yet), the current data do not allow assessment of predictor validity.

#### Practical/Research Implications

Adequate SA is essential for recognizing and preventing errors, or to mitigating their consequences.

#### Originality/Value

No validated questionnaires exist to assess SA. The approach of SA as a gradient for attitude and behavior as two distinct components provide more insight in this role of SA in healthcare.

### **Understanding trust-control interrelations in a culture of error aversion and low error tolerance**

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#### Purpose

Research into trust, control and trust-control interrelations contributed to an ongoing debate about how the relationship between these concepts evolves and affects formation, sustention and change of relations between individuals, groups and organizations. Cultural and contextual factors may explain differences in findings on trust-control relations, but empirical evidence and theory on this subject is missing. In this article, we investigate the cultural factors that determine the trust-control interrelations. We focus on a longitudinal analysis of this relationship to understand how changes in trust will lead to changes in control and vice versa.

#### Methodology

For this study the first author participated in a complex infrastructural project for a period of ten months. Several qualitative methods were used, such as participant observations, formal

and informal interviewing, document- and media analysis.

#### Results

Results show that an error aversion culture, strain from errors, lack of psychological safety, error intolerance, self serving attribution of errors, blaming and fear of losing one's position created a downward spiral of the trust-control relationship.

#### Limitations

In this paper we cannot make any statements about the causality of the relationship between elements of error culture, trust and control.

#### Research/Practical Implications

This paper provides important empirical evidence that cultural factors do explain a part of the trust-control interrelations. Organizations should take error culture into account in governance of intergroup and inter-organizational relationships.

#### Originality/Value

This paper is filling the theoretical and empirical gap that exists in the literature on trust-control interrelations, by showing how error culture shapes the relationship between trust and control.

### **Learning without judgment: A constructionist approach to error culture in aviation accident investigations**

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#### Purpose

Human Errors are held responsible for the majority of causes of catastrophic accidents in aviation. Learning from accidents is crucial to improve safety and has drawn organizations to take more subtle and constructive approaches towards managing human errors.



Two approaches, one behavioral psychological and the other systems theoretic, each formulated specific learning processes. From behavioral psychology, a more constructive error culture is said to contribute to learning, while systems theorists argue more sophisticated analyses of incidents and accidents are necessary. Both approaches, however, have shortcomings in their assumptions about human performance that may undermine learning. In this paper we propose a constructionist approach that allows for greater nuance towards errors made in hazard-prone organizations.

#### Methodology

We analyze the final report of the Dutch Safety Board of the Turkish Airlines crash in 2009. Using discourse analytical techniques the text was deconstructed to reveal how discursive strategies may over-simplify causality attributed to procedural violations.

#### Results

The analysis shows how official texts that serve a primary role in the learning processes of the entire aviation sector construct judgments that can undermine learning.

#### Limitations

The single interpretation of the report's discursive strategies provided here may be biased by the researcher's research objectives.

#### Research/Practical Implications

Constructionist practice-based research designs may allow for a better understanding of the roles of technology and societal context in error culture and learning processes.

#### Originality/Value

The constructionist framework synthesizes the competing behavioral and systems approaches to learning and safety.

### Position Papers

#### Occupational Psychology and NATO Management of International Crises

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##### State of the Art

NATO's highest military command established a new crisis management centre in 2012, built on new structures, organizations, and technology. This organization required as well new ways for its members to collaborate, both locally and globally, innovate, and design new analytical frameworks that correspond to the nature and character of international crises in the 21<sup>st</sup> century. A transformation of the military mindset in a multinational environment composed of 28 nations with individual, service, and national cultures challenged the application of stove-piped individual approaches and required the integration of multi-disciplinary approaches modified to meet the unique circumstances of the organization. Change comes slowly in multinational military organizations and multinational organizations are themselves a unique client with specific requirements - and in some cases- limitations in even having a common definition of what constitutes change, let alone an agreed trajectory and end-state. What is the starting point for changing a multinational organization? How do you achieve change and measure change? What is the role of discourse in bringing about change in multinational organizations? Does discourse have a greater role in changing multinational organizations? Does change prompt discourse or discourse prompt change?

##### New Perspective/Contribution

To my knowledge, this abstract summarizes the first time occupational psychologists have been introduced into this NATO military headquarters to assist in the refinement of processes and approaches to achieving ambitious

organizational change objectives for 28 nations invested in common security through a multinational crisis management center. Multi-methodological approaches adopted including six months of diary studies with 10% of the work force representing every functional area of the military headquarters; initial induction for all the work force based on feedback from diary studies; leadership engagement and goal setting; new proposed behaviours to link new processes to leadership goals; second phase of refinement of reorganization and reprioritization after feedback; and survey and structured interviews with 5% of individuals, including 100% of senior leaders.

#### Conclusion and Implications for Research/Practice

Change is taking place, new behaviours and attitudes have been adopted, the aperture of understanding of crises has widened as has the aperture of collaboration with other military, civilian, governmental and non-governmental organizations. The crisis management centre is a catalyst for changing the entirety of the military organization to align and transform it to match the more effective, efficient, and energetic crisis management centre. Focus groups and surveys indicate a 92% improvement in work climate and change achieved in crisis resolution approaches, including departures from traditional approaches and practices.

These results imply that change in multinational organizations dealing with highly stressful and urgent issues - and potentially combat operations - can be achieved, but require identifying universally accepted concepts and agreed understandings of the overall change process through discourse. In a multinational organization, cultural differences, gender bias, national stereotypes, service competition collectively and individually challenge this process and require the application of multiple occupational psychology

methodologies to attain and sustain a common understanding of the fundamental aspects of the overall change process.

It remains to be evaluated how permanent the changed work culture and behaviours are in an organization that changes one-third of its work force annually.

### Single Papers

#### **The moderating role of social context in the relationship between individual job satisfaction and absenteeism: A three-level investigation**

##### ***Nominee of the EAWOP Congress 2013 Best Paper Award***

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#### Purpose

Recent theoretical developments in research on social context (Cooper & Withey, 2009; Johns, 2006) strongly suggest that absence patterns within higher organizational structures as contextual boundary conditions determine whether levels of job satisfaction correspond to individual absenteeism. On the basis of situational strength, we hypothesized that mean and dispersion of absenteeism in higher structures jointly moderate (amplify) the individual satisfaction-absenteeism relationship.

#### Design/Methodology

Our sample was recruited from an organization for residential elderly care (495 employees working in 45 work-units that resided in 17 homes). Absence frequency (personnel records) was used to measure absenteeism.

Job satisfaction referred to job conditions (Neuberger & Allerbeck, 1978). Absence data 12 months before and after the survey was available. We aggregated individual absence (pre 12-months) to mean and dispersion levels of absenteeism within work-units and homes. Given the nested structure of our sample, we applied hierarchical linear modeling (HLM3, Raudenbush & Bryk, 2002).

#### Results

After controlling for prior individual absenteeism, health disorders, biographical differences and unemployment rate, we found that absence mean (homes) and absence dispersion (work-units) (pre 12-months) jointly moderated the individual relationship between satisfaction and absenteeism (post 12-months). Only when absence mean and dispersion were high, the relation was negative and significant. In case of low mean and dispersion, the relation was insignificant.

#### Limitations

Correlational design does not allow strong causal inferences.

#### Research/Practical Implications

We were able to tease out which combination of contextual factors is best for bringing out the effect of satisfaction on individual absenteeism.

#### Originality/Value

The present findings enlarge scholarly understanding of social context that shapes functional relationships.

### **Preconditions for high safety climate regarding patient safety and occupational safety in healthcare organizations**

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#### Purpose

The purpose of the study was to as comprehensively as possible uncover preconditions for the development of high patient safety climate and staff safety climate in healthcare, from the perspective of healthcare professionals.

#### Design/Methodology

Based on safety climate questionnaire data from 43 healthcare units in tertiary hospital care and elderly care in western Sweden, 13 physicians, 12 registered nurses and 11 nurse's aides were strategically selected from healthcare unit with high and low safety climates, respectively. The subjects were interviewed individually using critical incidence methodology, and asked to comprehensively describe situations in their workplace where patient safety and staff safety, respectively, had been high, as well as situations where such safety had been jeopardized. Data acquisition and analysis were based on the phenomenographic methodology.

#### Results

The results indicated important characteristics within four major categories:

- a) People – operative staff, work group, first line manager and higher management;
- b) Organization, coordination and resources;
- c) Perspective on health care, patients, own role, and limitations intrinsic of caring for people;

- d) Physical environment and technical systems.

#### Limitations

The study provides qualitative data on antecedents of safety climate in healthcare but does not provide a quantitative estimate on the relative importance of each condition.

#### Research/Practical Implications

The results may contribute to theoretical development regarding organizational antecedents of safety climate. They may also provide a concrete basis for improving staff safety as well as patient safety in healthcare.

#### Originality/Value

Little is known regarding antecedents of safety climate within organisations. Improving safety in healthcare is urgently needed, and a salient issue in many countries.

### **Individual and shared experiences of ethical culture: A context for occupational well-being**

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#### Purpose

Ethical culture is a specific form of organizational culture, and as such a socially constructed phenomenon (Schein, 1990). However, no previous studies have investigated the degree that employee perceptions of the ethical culture are shared within work units, which was the aim of this study. In addition, we studied the associations between ethical culture and occupational well-being (i.e., burnout and work engagement), both at the individual and work unit level.

#### Design/Methodology

The questionnaire data was gathered from one public sector organization, including 2146 respondents representing various occupa-

tions, from 245 different work units. The ethical culture was measured with the Corporate Ethical Virtues-scale (CEV; Kaptein, 2008), including sub-dimensions of clarity, congruency of management/senior management, feasibility, supportability, transparency, discussability and sanctionability. Burnout and work engagement were measured using 9-item scales.

#### Results

Multilevel structural equation modeling conducted with Mplus showed that 12–27 % of the total variance regarding the ethical culture dimensions was explained by the within-department homogeneity (shared experiences). Both at the within- and between-level higher perceptions of ethical culture associated with less burnout and higher work engagement.

#### Limitations

Longitudinal studies are needed to further investigate causal relationships.

#### Research/Practical Implications

Organizations should invest in creating ethical practices at a work unit level, and also pay special attention to work units with low ethical culture, for these units can expose employees to burnout.

#### Originality/Value

This study is among the first to demonstrate the ethical organizational culture as a socially constructed phenomenon, and indicate the associations between ethical culture and occupational well-being at both the individual and work unit level.

## Posters

### **Organizational culture, perceived organizational support and organizational commitment: Study in higher education institutions**

Joana Conduto Vieira dos Santos (Univ. of Algarve, PT) [jcsantos@ualg.pt](mailto:jcsantos@ualg.pt), Gabriela Gonçalves (Univ. of Algarve, PT)

#### Purpose

A society characterized by globalization leads to instability on companies due to the versatility of the markets (Jobert, 2001) and the constant need to innovate (Rebelo, 2006).

In terms of organizations has increased the debate on the importance of symbolic aspects need to humanize, based on trust (Antonello & Godoy, 2010). The changes imposed on public higher education institutions try to fit some management practices of the private sector, to the public organizations (Gioia & Thomas, 1996).

#### Design/Methodology

In response to these urgent concerns of the Portuguese higher education institutions, we tried to deepen the understanding of organizational reality in the context of the Portuguese Public Higher Education. Firstly, we considered a structural variable of the institutions, the Organizational Culture. We also examined the Perceived Organizational Support. The impact of these variables can be noticed at different levels, so the outcome variable considered is Organizational Commitment. 635 professionals of public higher education institutions compose the sample.

#### Results

Hierarchical multiple linear regression analyses revealed that organizational culture dimensions and perceived organizational support explained significant variance in organizational commitment: affective ( $R^2 = 32.4\%$ ),

instrumental ( $R^2 = 5.3\%$ ) and normative ( $R^2 = 14.1\%$ ).

#### Limitations

More studies are necessary to better understand the relationship between this variables in different areas.

#### Research/Practical Implications

Further studies imply an increase of the sample and confirmatory analysis should be performed.

#### Originality/Value

The observed relationship between variables under study allowed us to better understand the realities that exist in Portuguese Public Higher Education.

### **Communication climate and work engagement: The relevance of trust and openness**

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#### Purpose

The communication climate is critical to motivate employees to achieve organizational goals, for instance will strengthen the organizational identification associated with more job satisfaction, more involvement in the work, lower intent to leave work (e.g. Smidt et al, 2001).

Bakker & Leiter (2010) emphasize that employees' responses to policies, practices and organizational structures affect their potential to experience engagement. However until now it was not explored the role of a communication climate in work engagement.

We hypothesized that a more positive communication climate (trust and openness in communication; supportiveness; participation in decision-making) would be related to higher work engagement (vigor, dedication and ab-

sorption). Expecting also a more strong effect of a communication characterized by trust and openness.

#### Methodology

The sample consisted of 261 individuals from Portuguese companies in different sectors of activity (convenience sample). The questionnaire was answered in Qualtrics and included scales already validated.

#### Results

The results show that the communication climate has a significant impact on engagement explain between 0,5 % and 18 % of engagement variance. And, this impact is more significant for the dimension of trust and openness.

#### Limitations

In the future research should focus time effects; study specific organizations explore mediators and moderators that explain this relation.

#### Research/Practical Implications

These results highlights the need of valuing communication and developing an organizational communication based on trust and openness.

#### Originality/Value

To our knowledge, until now no studies focused the importance of communication climate for engagement.

### **Climate for innovation and its added value for effectiveness and wellbeing of Police members**

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#### Purpose

“Respecting existing rules” and “colleagues support” have been two traditionally strong cultural values/ climates in the Spanish Police

as an organization. More recently, efforts to modernize the Institution may have developed a climate for innovation among police officers. The objective of this study is to explore the impact that climate for innovation has on police members beyond traditional climates. Specifically, our hypothesis is that a higher level of climate for innovation may increase police officers’ perceived ability to solve problems as well as their job satisfaction.

#### Design/Methodology

Multiple regression analysis was applied on data from a sample of 153 Local Police officers in Spain.

#### Results

Results show that climate for innovation has a statistically significant and positive impact on police wellbeing and perceived effectiveness beyond that of traditional climates (respecting rules and colleagues support). Thus, climate for innovation explains 18% of additional variance in satisfaction levels and 1,5% additional variance in perceived ability to solve problems.

#### Limitations

It remains to be tested whether the added value of climate for innovation occurs in other job types, populations and countries, and in relationship to other dependent variables.

#### Research/Practical Implications

Policy makers in police organizations should strive for implementing innovation policies and allowing for participation of police members in the innovating process. Implications are analyzed in the frame of positive psychology, which aims to improve organizational effectiveness and the quality of work life.

#### Originality/Value

This study is a contribution to understand how fragmented and facet -specific climates combine and relate to each other to explain workers' wellbeing and perceived effectiveness.



### **An exploration of preferred organisational culture characteristics across UK, French and Dutch managers**

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Katarina Karringer (OPP Ltd, UK)

#### **Purpose**

Building upon previous research into cross-cultural differences, this study explored differences between managers from the UK, France and The Netherlands in terms of their preferred working environments and how they like to be led.

#### **Design/Methodology**

A large and diverse sample of managers from various organisations was surveyed to gather the data. Results supported findings from previous research exploring cross-cultural differences e.g. the work of Hofstede, and the GLOBE study (House et al, 2004).

#### **Results**

Broadly speaking, French managers valued structure and clarity, and were more comfortable with the concept of a 'job for life'. Dutch managers tended to value many of the same things, but to a lesser extent. This suggests that these workplace attributes may be less important to them. For example, being expected to act in accordance with guidelines was valued considerably less than amongst French managers. UK managers tended to value role clarity and being given independence at work.

#### **Limitations**

The findings may to some extent reflect a greater willingness for people of some nationalities to express strong views when responding to surveys. However, we feel the study also uncovers more fundamental differences in attitudes towards work.

#### **Research/Practical Implications**

The practical implications of this research are widespread. Organisations are expanding be-

yond their boundaries and the EU is an open market for employees and employers.

#### **Originality/Value**

The recent, ongoing, recession has increased the importance of demonstrating cultural awareness. This research uses data collected during 2011, and contributes new insights from challenging economic times to help build upon existing models.

### **Formation of organisational culture in a higher education institution: a premise of successful educational work in organisation**

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#### **Purpose**

In order to understand the educational organizational culture activities it is essential to understand its main values as an organisation in the aspect of organizational culture, the efficiency of performance, strategy and the building of organization image (Deem, 1998; Giroux, 2003; Lewis, et.al., 2005; Fralinger et.al., 2010). The research aim is to identify peculiarities of organizational culture of higher educational institution. The population of respondents consisted of higher educational institution teachers (a total number - 141).

#### **Design/Methodology**

The following methods were applied in the study: literature review, a written survey using standardized questionnaire, analysis of statistical data. Statistical analysis was carried out by using the SPSS Windows 19.0.

#### **Results**

Research results show low evaluation of teacher motivation system, a need to change

the image of the higher education institution, and unequal evaluation of employee work.

#### Limitations

The research results should be evaluated without making generalisations. Attention should be paid to the following limitations: 1) teachers from the institution of higher education were selected by using convenience sampling; 2) the research was carried out in one institution of higher education.

#### Research/Practical Implications

The research results could be valuable practically, since, relying on the evaluation of organisational culture in the institution of higher education, it is possible to identify certain changes that are needed in the organisation in order to achieve employee productivity and motivation, and successful organizational activities.

#### Originality/Value

Organisational culture of higher education institutions has never been researched in Lithuania before. Thus, the research results have filled the existing gap in scientific research of the field.

### **Assessing the socio-moral climate in organizations: Validation of an English version of the SMC scale**

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#### Purpose

Empirical studies have shown that the socio-moral climate (SMC) in German speaking organizations significantly predicts organizational commitment and pro-social and community oriented behavior. So far, structurally anchored organizational democracy as well as pre-occupational socialization experiences have been shown as antecedents for SMC.

Five components constitute a socio-moral climate: 1. Open confrontation with conflicts, 2. Reliable and constant appreciation, 3. Open communication and participative cooperation, 4. Trust-based assignment and allocation of responsibility, and 5. Organizational concern for the individual. Two studies were carried out to validate an English version of the SMC in the USA.

#### Design/Methodology

In the first study, the survey was validated with a sample of 376 employees by assessing socio-moral climate, psychological ownership, work engagement and knowledge sharing. The second study will further validate the factor structure of SMC, and will assess organizational participation and servant leadership as antecedents to SMC, as well as organizational and interpersonal deviance, cynicism and turnover intention as dependent variables.

#### Results

Confirmatory factor analysis confirmed the factor structure of the SMC scale, and positive correlations with psychology ownership, work engagement and knowledge sharing indicate its validity.

#### Limitations

The cross-sectional design does not allow determining causality; in the future, SMC should be studied at the organizational level.

#### Research/Practical Implications

The study provides an instrument for organizations to assess their socio-moral climate.

#### Originality/Value

To our knowledge, these are the first studies assessing the socio-moral climate in business organizations in the USA.

**Toward a new theory-based model of organizational culture dimensions: The Functional Analysis Method (FAME) approach**

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**Purpose**

The strong interest in organizational culture has led to a proliferation of different cultural value dimensions. Thus, the purpose of this study is the development of a framework that integrates organizational value dimensions based on a systems-theoretical perspective. The Functional Analysis Methods (FAME) approach describes a taxonomy of cultural value dimensions grounded on fundamental system challenges. On the basis of the FAME approach, the development of an inventory measuring cultural value dimensions is presented.

**Design/Methodology**

Different data sets consisting of convenience samples and German company samples were used. Factor analysis following Jäger's (1982) approach was applied to test the existence of the proposed dimensions. The theoretically proposed bimodal model was compared with a single factor model.

**Results**

Testing the theoretical assumptions using confirmatory factor analysis revealed a good fit to the data.

**Limitations**

Due to the use of convenience samples, the generalizability of the findings is restricted. Additionally, the homogeneity of culture within one organization could not be tested.

**Research/Practical Implications**

Because of its systems theory based structure, the FAME approach allows conclusions about

the relation of organizational value dimensions and situational contingencies or other external variables. From an applied point of view, the FAME Culture Inventory offers new options to comprehensively analyze organizational culture.

**Originality/Value**

Extending previous research, this study presents a theoretical framework that allows integrating organizational culture value dimensions. Following the new framework, a clear description of organizational value dimensions is possible. Moreover, their internal structure and external relationships to other variable can be described.



# 16. Teams and Workgroups

## Symposia

### Links between Experienced and Instigated Mistreatment in Health Care Work

Chair: *Michael Leiter* (Acadia Univ.)  
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#### State of the Art

The quality of relationships among people at work has become a matter of increasing concern. The experience of workplace mistreatment has clear links to problems with workgroup productivity as well as individual health and wellbeing. An important research agenda is determining the factors that contribute to individuals behaving uncivilly towards their colleagues. Some models consider such behavior to reflect shortcomings within a few individuals. Other models view workplace mistreatment as an inherent quality of a workgroup's culture.

#### New Perspective/Contribution

This symposium considers workplace mistreatment in the health care sector of two national contexts—Canada and Austria. The research considers the problems from distinct perspectives. One paper examines the role of psychological capital in moderating the relationships between experienced mistreatment and feelings of distress associated with post-traumatic stress syndrome. Two papers examine the link of received incivility with instigated incivility: to what extent does one's organizational role (first line supervisor v. front line staff) influence one's proclivity to behaving uncivilly? Another considers the moderating role of trust in the relationship of received to

expressed incivility. The fourth paper contrasts the Canadian and Austrian health care sectors in terms of the level of workplace mistreatment and reactions to it.

#### Conclusion and Implications for Research/Practice

The overall conclusion is that workplace mistreatment has some basis within the social culture of workgroups. To some extent, the level of expressed incivility reflects the level of received incivility. Interventions to improve workplace discourse benefit from organizational values of respect.

### ***Presentations of the Symposium***

#### **Psychological capital as mediating the relationship of bullying with distress**

*Heather K. S. Laschinger* (Univ. of Western Ontario)  
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#### Aim

The aim of this study was to examine the relationship between nurses' exposure to workplace bullying and PTSD symptomology and the protective role of intrapersonal resources (psychological capital).

#### Background

Research has shown that workplace bullying has serious organizational and health effects in healthcare which threaten the quality of patient care. Although research in nursing has linked workplace bullying to numerous job-related outcomes, few studies have examined the relation of workplace bullying to serious mental health outcomes, such as PTSD. In addition, the buffering effect of intrapersonal resources to protect nurses from deleterious effects of workplace bullying has not been studied.

#### Method

A provincial survey of hospital nurses (n = 1205) was conducted to study the relationship

between workplace bullying and PTSD and the extent to which intrapersonal resources (Psyscap) influenced this relationship. Nurses completed 3 standardized measures of bullying, PTSD, and Psyscap. The return rate was 35%.

#### Results

A moderated regression analysis revealed that more frequent exposure to workplace bullying was significantly related to reports of PTSD symptomology ( $R^2 = .38$ ), but Psyscap was not a significant moderator of this relationship. Bullying exposure and Psyscap were significant independent predictors of PTSD symptoms ( $\beta = .52$  and  $-.21$ , respectively).

#### Conclusions

Workplace bullying appears to have a negative relationship with PTSD, a serious mental health outcome. This effect was not mitigated by Psyscap, posited to be a protective intrapersonal resource against workplace stressors. The results suggest that workplace bullying is a serious threat to nurses' health requiring attention of hospital management.

### **Incivility at the workplace: A comparison between Austrian and Canadian health care workers**

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#### Purpose

Incivility is not an exception at the work place. Two-third of employees in America experience uncivil behavior at work, such as disrespect, social exclusion and/or rude behavior. Studies in the U.S. and in Canada indicate that especially health care workers often experience uncivil behavior and suffer from negative outcomes like higher emotional strain, exhaustion, job dissatisfaction, and lower commitment.

#### Design/Methodology

To investigate if Austrian health care workers experience this high extent of incivility at the workplace as well, a comprehensive online-study was performed. For this study, the Incivility at Work Scale was translated into German in this study. 2168 Austrian workers participated in this online-survey concerning uncivil behavior, burnout and job satisfaction. Out of these 2169 participants, 294 persons worked in the health care sector.

#### Results

The results of the reliability analysis show high coefficients for the translated questionnaire. Cultural differences in the experience of uncivil behavior at the workplace between Austrian and Canadian health care workers as well as outcomes of incivility on stress, recovery and job satisfaction are discussed.

#### Limitations

Further studies have to show if the results can be transferred to other business sectors as well.

#### Research/Practical Implications

The findings indicate that both Canadian and Austrian health care workers face uncivil behavior at work but experience different forms and outcomes of incivility.

#### Originality/Value

This study is the first to evaluate if the American/Canadian concept of incivility at the workplace can be transferred to the culture of Austrian workers equally.

### **Validating a measure of incivility at work: How trust moderates the relationship of received to instigated incivility**

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### Purpose

Because incivility has become a ubiquitous topic in research and workplaces, we were interested in validating a new measure of incivility (arising from different work groups as well as one's own instigated incivility towards others). We compared it with existing measures of incivility and civility, and examined their factor structures. We also examined its relationships with important work factors (e.g., trust), and examined the extent to which trust moderated the relationship of others' incivility with ones' self-reported instigated incivility.

### Design/Methodology

We surveyed two samples: 147 first-line managers and 801 staff in health-care in Canada.

### Results

PCAs with oblique rotation (with all incivility and civility scales) supported the hypothesized factor structure for both samples (accounting for 68% and 75% of the variance;  $\alpha$ 's=.84 to .95). Both trust in management and coworkers moderated some relationships between received and instigated incivility, showing similar patterns of results: Instigated incivility was highest when co-workers or supervisors behaved uncivilly. Instigated incivility was the lowest when trust is high and incivility is low.

### Limitations

The study is cross sectional: Future research must examine this new scale and its relationship with trust using longitudinal designs with a broader range of employees.

### Originality/Value

This study provides initial support for the validity of the new scale of incivility, which can be used in both research and organizational work. The data underscore the importance of examining incivility from multiple sources as well as the importance of trust when examining incivility.

## Distinct perceptions of incivility by managers and frontline health care providers

Michael P. Leiter (Acadia Univ.) [michael.leiter@acadiau.ca](mailto:michael.leiter@acadiau.ca), Arla Day (Saint Mary's Univ.), Heather K S Laschinger (Univ. of Western Ontario)

### Purpose

Research Question 1: To what extent is the frequency with which employees instigate incivility is related to (1) the frequency of incivility that they receive and (2) intrapersonal factors? That is, is generating incivility reflect of both employees' social environment as well as their level of cynicism.

Research Question 2: Would a new measure of workplace incivility provide distinct perspectives on received and instigated social behavior in the workplace?

### Design/Methodology

Health care providers in eastern Canada completed surveys that assess the quality of social interactions (civility (Osatuke, et al, 2010), psychological safety (Edmonson, 1999), supervisor incivility and coworker incivility (Leiter, 2012)), efficacy using the MBI professional efficacy scale (Maslach, Jackson, & Leiter, 1996), and leadership behaviors of first line managers (Carless, Wearing, & Mann, 2000). The sample included 185 first line managers and 1016 staff members.

### Results

For front-line staff, coworker incivility occurred more frequently than supervisor incivility ( $t(874)=5.57$ ,  $p<.01$ ) that occurred more frequently than instigated incivility ( $t(874)=8.40$ ,  $p<.01$ ).

For FLMS, coworker incivility occurred more frequently than supervisor incivility ( $t(163)=3.02$ ,  $p<.01$ ) and subordinate incivility occurred more frequently than supervisor incivility ( $t(158)=3.58$ ,  $p<.01$ ). Instigated incivility occurred less frequently than coworker incivility ( $t(163)=4.32$ ,  $p<.01$ ) and subordinate

incivility ( $t(158) = 5.61, p < .01$ ). The rates of coworker and subordinate incivility did not differ ( $t(158) = 0.91, p = .36$ ) nor did rates of supervisor and instigated incivility ( $t(162) = 1.61, p = .11$ ).

#### Research/Practical Implications

Results indicated instigated incivility reflects its social context and intrapersonal qualities reflected in cynicism.

#### Originality/Value

We contrast supervisor and employee perspective on workplace relationships.

## The Reciprocal Effects of Leadership and Diversity in Teams

Session Chair: *Meir Shemla (Rotterdam School of Management)* [shemla@rsm.nl](mailto:shemla@rsm.nl)

#### State of the Art

Previous research on the relationship between leadership and diversity in teams has mainly focused on solving the diversity puzzle: What are the conditions that help realizing the potential of diverse teams? Indeed, this line of research has proved useful by illustrating that certain leadership styles are better fitted for the purpose of managing diverse teams.

#### New Perspective/Contribution

This symposium posits that linking leadership with team diversity can answer much more than this question. Specifically, the studies illustrate that linking leadership and team diversity offers a promising pathway to understanding why the performance potential entailed by teams is only rarely unlocked and why not all teams are bound to benefit equally from their potential.

#### Conclusion and Implications

The studies show that leadership and diversity have a strong influence on each other's effect in teams, such that leadership influences the

consequences of diversity, while diversity defines the impact of leadership. Specifically, we found that the effectiveness of self-management in teams depends on the extent to which they were diverse with regard to goal orientation (study 1). Similarly, the impact of empowering leadership on team performance was influenced by cognitive diversity in teams (Study 2). Study 3 reports that performance feedback resulted in differential impact in diverse and homogeneous teams. Finally, the strong link between diversity and leadership is reflected also in Study 4, where the mere expression of moods by the leader was found to influence the effect of diversity on team processes.

### ***Presentations of the Symposium***

#### **Self-managing teams and goal orientation diversity**

*Anne Nederveen Pieterse (Rotterdam School of Management)* [anederveenpieterse@rsm.nl](mailto:anederveenpieterse@rsm.nl), *John R. Hollenbeck (Michigan State Univ.)*, *Daan Van Knippenberg (Rotterdam School of Management)*, *Matthias Spitzmüller (National Univ. of Singapore)*, *Elizabeth P. Karam (Texas Tech Univ.)*

#### Purpose

Regardless of the vast amount of attention to self-managing teams, little research has focused on potential moderators of the effectiveness of self-managing structures. In the present study we propose that self-managing team structures are less effective for groups with members that differ in the goals they set in achievement settings (i.e. goal orientation), because team learning and information elaboration are more difficult in these teams.

#### Design/Methodology

We used an experimental 3x2 design with 55 five-person groups. Goal orientation diversity (homogeneous learning oriented versus homogeneous performance oriented versus di-

verse) and authority structure (hierarchical versus self-managed) were manipulated.

#### Results

Teams with a self-managing structure performed worse than teams with a hierarchical leadership structure when they were diverse in goal orientation. This effect was mediated by team learning and information elaboration. For homogeneous teams a self-managing structure did not impact performance.

#### Limitations

Although the experimental design was most suitable for our research purposes, future research in field settings would be valuable to increase generalizability.

#### Research/Practical Implications

The results imply that for the effectiveness of self managing team structures it is important that the members are in line in their goal orientations.

#### Originality/Value

We contribute to the self-managing team literature by identifying when self-managing teams may be less effective. We contribute to the goal orientation literature by replicating and extending recent developments in diversity in goal orientation. Finally, we also contribute to the general diversity field by identifying that hierarchical leadership may help diverse teams.

### **The good bearing of bad news: The differential impact of feedback valence on the creativity of informationally diverse and homogeneous teams**

*Inga Hoever (Univ. Pompeu Fabra) [inga.hoever@upf.edu](mailto:inga.hoever@upf.edu), Jing Zhou (Rice Univ.), Daan van Knippenberg (Rotterdam School of Management)*

#### Purpose

We examine the effect of positive and negative feedback on the creativity of diverse and

homogeneous teams. Teams regularly encounter feedback. Yet prior research on the interplay of feedback valence and diversity remain sparse. We propose that informational diversity moderates the effect of feedback valence on team creativity due to the potential of positive and negative feedback to differentially affect information processing depth and style in diverse and homogeneous teams.

#### Design/Methodology

We tested our hypotheses in a group experiment (78 groups) in which we manipulated informational diversity and feedback valence. We videotaped all teams to obtain observational team process measures.

#### Results

Diversity and feedback interacted in their effect on creativity such that negative feedback had a more positive effect for diverse teams whereas positive feedback had a more positive effect for homogeneous teams. This moderated effect was jointly mediated by information elaboration and team divergent thinking.

#### Limitations

The experimental nature of our study renders the external validity of our findings a question for future research.

#### Research/Practical Implications

Our findings imply that diverse and homogeneous teams react differently to performance feedback and point to ways to support teams receiving feedback that may otherwise undermine their creativity.

#### Originality/Value

Our study is one of the first to address differences in the effects of different feedback types for different team types. It also adds to research on feedback and creativity as it shows that the individual-level finding of an advantage of positive over negative feedback does not fully extend to teams.

### **The effects of empowering team leadership on cognitively diverse teams**

*Eric Kearney (GISMA Business School / Leibniz Univ. Hannover) [kearney@wiwi.uni-hannover.de](mailto:kearney@wiwi.uni-hannover.de), Meir Shemla (Rotterdam School of Management)*

#### **Purpose**

Although empowering leadership entails many potential benefits, it is still unclear under what conditions it fosters performance of teams. Addressing this issue, we propose that certain team factors represent either centrifugal forces that stimulate divergence or centripetal forces that ensure coordination. We posit that the effects of empowering leadership on team performance depend on the establishment of a balance of forces. We tested this proposition by examining the interactions between empowering leadership (centrifugal force) and cognitive diversity (centrifugal force), visionary leadership and task interdependence (centripetal forces).

#### **Design/Methodology**

We gathered data from a sample of 77 teams.

#### **Results**

The results confirmed that an imbalance of centrifugal and centripetal forces (i.e., empowering leadership and diversity) impedes performance while a balance of forces enhances performance in teams.

#### **Limitations**

Limitations include relying on subjective, rather than objective, ratings of performance provided by the respective team leaders.

#### **Research/Practical Implications**

Enacting high levels of empowering leadership in cognitively diverse teams entails a risk of a "leaderless chaos". To curtail this risk, leaders could either avoid assembling highly cognitively diverse teams or, to retain the potential benefits of diversity, direct and monitor such teams to a greater extent while granting slightly less autonomy.

#### **Originality/Value**

The study offers a theoretical model of the boundary conditions of empowering leadership. This model can help make sense of the large variability of findings in the extant literature on empowering team leadership and team diversity, and explain why not all teams are bound to benefit equally from such team factors.

### **Team diversity, team processes, and team performance: The moderating role of leader mood**

*Meir Shemla (Rotterdam School of Management) [shemla@rsm.nl](mailto:shemla@rsm.nl), Eric Kearney (GISMA Business School / Leibniz Univ. Hannover), Wegge Jürgen (TU Dresden), Sebastian Stegmann (Johann Wolfgang Goethe-Univ., DE)*

#### **Purpose**

We examined whether leaders, through the expression of moods, can influence the consequences of diversity in teams. We hypothesized that leader mood will impact the respective relationships between diversity and collective team identification and elaboration of task-relevant information. We further hypothesized that the association between elaboration and objective team performance will be moderated by identification.

#### **Design/Methodology**

The sample consisted of 59 teams in a large financial services firm. The data were collected from multiple sources and over three points in time.

#### **Results**

Given high levels of leader positive mood, diversity was positively related to team identification and negatively associated with elaboration. In contrast, given high levels of leader negative mood, diversity was negatively related to team identification and positively associated with elaboration. Finally, elaboration

was conducive to team performance only when team identification was high.

#### Limitations

We focused on the influence of leaders' moods on team members' moods and behavior. In reality, however, these processes are likely to be reciprocal.

#### Research/Practical Implications

The results suggest that leaders of diverse teams are well advised to monitor and regulate their emotions in line with situational demands. Doing so enables leaders to better leverage the performance potential that diversity entails.

#### Originality/Value

This study contributes to the nascent literature that examines the role of leaders in unlocking the performance potential of team diversity. Importantly, the results shed light on elaboration, a central construct in the diversity literature, by showing that it not invariably conducive to team performance but rather depends on team identification.

## Team Processes and Team Performance: The Effects of Diversity Perceptions and (Shared) Leadership

Session Chair: *Conny H. Antoni (Univ. of Trier)*  
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#### State of the Art

Team composition and leadership are important input factors in many IPO models of team effectiveness. Inconsistent results of team diversity research have begun to change the focus from objective characteristics of team composition to diversity perceptions of team members. Similarly, the focus of team leadership research broadened to aspects of shared and dispersed besides vertical leadership.

#### New Perspective/Contribution

The six empirical papers in this symposium pick up the call for a more differentiated view on team diversity and leadership and show that

1. differing perceptions of separation, variety, and disparity within teams are the best predictors of team conflict, reflection, and information exchange;
2. need for differentiation increases positive diversity beliefs;
3. communicating temporal characteristics and temporal consensus moderate the relationship between pacing style diversity and team processes;
4. leadership styles, based on Full Range of Leadership and Dispersed Leadership Theory, predict team member's affective commitment and work motivation depending on their salience;
5. shared leadership is positively related to team performance via mediating team learning behaviors;
6. participative leadership style and decision making, as well as cross functional cooperation predict team proactivity via building shared meaning as a crucial team learning behavior.

#### Conclusion and Implications for Research/Practice

These results underline the importance of analyzing diversity perceptions in teams for understanding and managing diversity and their effects on team processes as a crucial leadership task. Moreover, by participative leadership behavior and decision making management seems to be able to foster team learning such as the development of shared meaning and thus team performance.



### ***Presentations of the Symposium***

#### **Multilevel effects of team diversity on team processes: The role of individual diversity perceptions**

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 Deutschland GmbH)

##### **Purpose**

Previous research on diversity within work teams and organizations has yielded mixed results and indicated the importance of the individual perception of heterogeneity within the team as a neglected explanation for the seemingly inconsistent effects. This study examines three distinct types of diversity (diversity as separation, variety, and disparity) and compares the objective team level indicators with team member perceptions of diversity on individual level. Team member diversity perceptions are hypothesized to be heterogeneously perceived and processed within teams and, to explain variance in team processes (team conflict, reflection, and information exchange) beyond objective diversity measures on team level.

##### **Design/Methodology**

Following a pilot study the hypotheses were tested with hierarchical linear modeling using data from 69 organizational teams (N = 425 individuals).

##### **Results**

The results show that (1) perceptions of diversity within work teams yield low agreement among team members; and (2) individual perceptions of separation, variety, and disparity are the best predictors of team processes beyond the effects of general subjective diversity perceptions and objective diversity measures on the team level.

##### **Research/Practical Implications**

The results underline the importance of subjective processes such as selective diversity

perceptions in order to understand and predict the effects of team diversity. From a practical point of view, these findings show new directions for diversity management, or rather management of diversity perceptions, as the awareness of heterogeneity seems to be more critical for team functioning than objective indicators of the group composition.

#### **What makes us see, like and look for diversity? The effects of team members' need for differentiation on diversity perceptions, beliefs and subsequent team processes**

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 Trier), Rasmus Oertel (Univ. of Trier)

##### **Purpose**

Previous research frequently revealed a low association between objective team diversity and its subjective perception by team members. The present research suggests that personal characteristics such as team members' need for differentiation (NFD) influence the accessibility of team diversity. Therefore, it is hypothesized that NFD affects (1) perceived team diversity, (2) team members' sensitivity towards differences, and (3) diversity beliefs. These relationships and their consequences for team processes are assessed in three Studies.

##### **Design/Methodology**

In Study 1 we collected longitudinal data from 69 teams (N = 270 individuals) and tested our hypotheses with hierarchical linear modeling. Study 2 (N = 79) examined how the interaction between comparative fit (high vs. low objective team diversity), and team members' NFD impacts their sensitivity towards differences. In an ongoing Study 3, we induce a high vs. low NFD to assess the effect on participants' implicit diversity perceptions.



### Results

A high NFD increases (1) perceptions of team diversity (2) a sensitivity towards differences, and (3) positive diversity beliefs. Comparative fit increases the situational fit of NFD and therefore augments its effects. Initial analyses point to effects on team processes.

### Limitations

Validation of the NFD scale is still in progress.

### Research/Practical Implications

Our manipulation of NFD in Study 3 suggests that practitioners can deliberately activate NFD in case a high sensitivity towards differences in teams is needed to discover task-relevant informational differences.

### Originality/Value

The present research contributes to a better understanding of when and how diversity is perceived and thus enacts its influence on team processes.

## **The relationship between temporal diversity and team processes: The importance of communicating temporal characteristics and temporal consensus**

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### Purpose

Recent research indicated that, unless managed effectively, team diversity on temporal characteristic may have a negative impact on team performance. What remains unclear is what processes underlie this negative effect of temporal diversity and how teams can be empowered to guard themselves against this effect. Most research has focused on task-focused strategies, leaving more person-focused approaches unaddressed. These may, however, be promising considering that temporal differences are believed to elicit implicit assumptions regarding others' motives which lead to unfavorable personal attributions and

destructive types of team conflict. In the present study, we examined the moderating effect of communicating temporal characteristics on the relationship between pacing style diversity and various team processes (including team learning, team cooperation, team potency, and team conflict), and hypothesized a mediating role of temporal consensus.

### Design/Methodology

Hypotheses were tested in a cross-sectional survey study among 39 project teams (N = 125 individuals) from an international consultancy company. Team size varied from 2 to 8 members. Minimum response rate per team was 60%.

### Results

Data analyses suggest that pacing style diversity increased relationship and process conflict. Temporal characteristics communicated added to team cooperation and team learning. Moreover, we found moderating effects of both temporal characteristics communication and temporal consensus. For example, in teams with higher levels of steady pacing style diversity, high levels of temporal characteristic communication increased the level of cooperation among team members.

### Limitations

### Research/Practical Implications

The study adds practical and theoretical insights to overcome deleterious effects of temporal diversity in project teams.

## **The effect of missing leadership on team member's affective commitment and motivation**

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### Purpose

Based on the Full Range of Leadership Model (FRLM) and the Dispersed Leadership Theory in Teams (DLT) we investigated the effect of

the absence of leadership styles on team member's affective commitment and work motivation. Moreover, we examined the effect of missing leadership for salient absence of leadership.

#### Design/Methodology

Using a field-experimental policy-capturing approach, hypothetical leadership scenarios were developed, reflecting a 3x2x2 design with the variables leadership (transformational, transactional, or laissez-faire according to FRLM for Study 1; structural, interactional, or team according to DLT for Study 2), presence (present or missing) and salience (salient or non-salient). Participants rated their affective commitment and work motivation. In sum, 145 employees completed the scenarios for Study 1 and 107 for Study 2.

#### Results

Multilevel analyses revealed (1) strong negative effects for the missing of all leadership styles, (2) particular stronger effects if the absence was salient, and (3) positive effects for the total of simultaneously present leadership styles on commitment and motivation.

#### Limitations

The main limitation of this research is a threat to the external validity of the results. Scenario-based surveys may not fully generalize to actual organizational leadership situations.

#### Research/Practical Implications

Results show that the negative effects of missing leadership are stronger if the missing is salient. To prevent negative effects of unavoidable missing leadership, organizations can enable multiple leadership styles to compensate the salient missing of one leadership style.

#### Originality/Value

Previous research is extended by providing first evidence of simultaneously effective

leadership styles and negative effects of missing leadership.

### **Team learning behavior as a mediator of the influence of shared leadership capacity on team performance**

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Conny H. Antoni (Univ. of Trier)*

#### Purpose

Although more and more research has focused on team learning processes in recent years, and several antecedents of team learning have been analyzed, there is only little known about the emergence of work group learning, compared to the vast amount of literature on team effectiveness in general. This study builds upon a framework of self-regulation in order to understand team learning as a cyclical, iterative process of self-regulation, following goal assessment and detection of adaptation requirement. Following Self Determination Theory and Organismic Integration Theory it examines the relationship between the team's capacity to lead itself and self-regulatory behavior of collective learning.

#### Design/Methodology

Longitudinal data was derived from 86 student project teams (N = 354 individuals). Hypotheses were tested conducting hierarchical regression and bootstrap analyses.

#### Results

The results show that (1) shared leadership capacity is positively related to team learning behavior and (2) team learning behavior mediates the relationship between shared leadership capacity and team performance.

#### Limitations

Results might be specific for student project teams, therefore generalizability to other settings has to be tested yet.

### Research/Practical Implications

The study contributes to the literature on team learning by showing that the capacity to lead itself empowers a team to show learning behaviors. Hence, a higher degree of self-determination allows teams to be more adaptive through motivational and self-regulatory processes. Additionally this study broadens the current view on shared leadership, as it implies a more participation-oriented perspective. The results have strong practical value for designing teams and their leadership structure.

### Teamwork within lean production or the paradox between standardization of work and innovation

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#### Purpose

The core of lean production is founded on the concept of continuous product and process improvement and the elimination of non-value-adding activities and teamwork as a pillar to becoming lean. Autonomy has shown to be crucial for motivation, job satisfaction, performance and innovative teamwork. To reduce non-value adding activities means to standardize work procedures and hence to reduce autonomy. Continuous improvement, on the other hand, relies on teams that are proactive. How can the paradox between the standardization of work and innovative teamwork be understood? The aim of the study is to explore job design practices that enhance team proactivity within a lean production system where autonomy is uttermost restricted. We hypothesize that job design parameters (team participation in decision making regarding job routines, participative leadership style, cross-functional cooperation) enhance team proactivity via team learning (building shared meaning) as a mediator.

### Design/Methodology

The hypotheses were tested using hierarchical multiple regression and mediation analysis with aggregated data consisting of 57 teams (N = 417 individuals) on shop-floor level within one production plant.

#### Results

Results showed that the model explained 49% of team proactivity, of which building shared meaning was the major contributor and mediator between team participation, cross-functional cooperation and proactivity.

#### Limitations

Results are based on a cross-sectional study and cannot be interpreted causally yet.

### Research/Practical Implications

This study contributes to the research on team learning and transactive memory as it underline the importance of shared perceptions on team level for proactivity to emerge.

## Making High Responsibility Teams work – Requirements, Attitudes, and Processes Related to Team Performance

*Session Chairs: Michael Josef Burtscher (Univ. of Zurich, CH) [m.burtscher@psychologie.uzh.ch](mailto:m.burtscher@psychologie.uzh.ch)*

*Vera Hagemann (Univ. of Duisburg-Essen, DE) [vera.hagemann@uni-due.de](mailto:vera.hagemann@uni-due.de)*

#### State of the Art

High Responsibility Teams (HRTs), such as medical, crisis management, and air traffic control teams, face many challenges during their daily tasks. These challenges include working under time constraints, unexpected events, and severe consequences of errors. Given the importance of HRTs in our society, it is crucial to identify factors that can improve the performance of these teams. Research has started investigating these factors, both on

individual (e.g. personality) as well as on the team level (e.g. team mental models).

#### New Perspectives

The proposed symposium contributes to a deeper understanding of the factors influencing performance in HRT. We present five studies investigating requirements, attitudes, and processes related to HRT-performance. Hagemann and Kluge present an instrument measuring collective orientation, an attitude relevant for HRT-performance applicable in personal selection or training evaluation. Corver et al. developed a new method to assess team situational awareness in air traffic control. Van der Haar et al. investigate the interplay between team learning behaviours and team situation models and its effect on the performance of emergency management teams. Schmutz and Manser conducted a hierarchical task analysis to identify coordination requirements in medical teams. Burtscher et al's work focuses on evaluations of expertise for predicting coordination and team performance in the operating room.

#### Research/ Practical Implications

Building on existing work, the proposed symposium fosters the understanding of individual factors and team processes, in particular with regard to HRT-performance. Moreover, the new assessment methods presented facilitate the investigation of these characteristics in realistic settings, which is also relevant for practitioners.

### ***Presentations of the Symposium***

#### **Development and validation of a German scale to measure collective orientation: Effects of an individual difference measure within interdependent team contexts**

Vera Hagemann (Univ. of Duisburg-Essen, DE) [vera.hagemann@uni-due.de](mailto:vera.hagemann@uni-due.de), Annette Kluge (Univ. of Duisburg-Essen, DE)

#### Purpose

Collective orientation (CO) is an attitude and essential within work contexts of interdependently working team members, because of its positive influence on team performance. Especially High-Responsibility-Teams (HRTs), e.g. fire-fighting or anaesthesia teams, work within contexts of high task interdependence. The purpose of this study was to develop and validate a German scale to measure CO.

#### Design/Methodology

15 German-speaking items were generated, 10 regarding affiliation (valuing working in a team rather than alone) and 5 regarding dominance (valuing cooperation more than power and control). The instrument was applied in a study with 60 participants. 30 members scored high and 30 members low regarding CO. The team task was a choosing or decision-making task, a variation of a hidden-profile (resolving a murder case). In order to test divergent and convergent validity other constructs were measured as well.

#### Results

Results showed good internal consistencies for CO and the subscales. As expected, positive correlations were found with cooperativeness and conscientiousness, negative correlations with preference for solitude and personal independence. There was also a significant difference in team performance regarding the murder case between CO high and low.

#### Limitations

It was a lab-study, field studies should be conducted. The instrument should be validated in HRTs.

#### Research/Practical Implications

Results demonstrate the importance of CO on team performance within interdependently working teams. CO will be important for personnel selection and development in HRTs,

because CO is an attitude and therefore malleable by training or experience.

#### Originality/Value

No such instrument exists for analyzing German-speaking HRTs so far.

### **Towards an observational instrument to measure team situational awareness based on the mutual belief model**

*Sifra Corver (ETH Zurich, CH) [scorver@ethz.ch](mailto:scorver@ethz.ch), Kohei Nonose (Univ. of Tokyo, JP), Gudela Grote (ETH Zurich, CH)*

#### Purpose

High reliability teams in complex and dynamics settings require high levels of shared cognition allowing efficient team coordination and high levels of team performance. Despite the fact that much research has been devoted to team cognition, the operationalization of team situational awareness (TSA) and the development of measurement techniques have received little attention up to now. The main problems when operationalizing TSA are:

1. Current definitions only marginally reflect the actual shared knowledge within the team (for example, it does not answer to the notion of transactive memory).
2. Current attempts to operationalize TSA have failed to acknowledge the dynamic nature of TSA and the multiple layers of cognition, which are required to build TSA.
3. Previous research has failed to define content domains of team situation awareness.

#### Results

Our study aimed at developing a new method to measure TSA based on the Mutual Belief Model (MBM), which takes into account these issues. The new TSA method can be used in real life settings using behavioral observation

by Subject Matter Experts. The method was validated in Air Traffic Control environment.

#### Limitations

Limitations concern the requirement of SME's as observers and the difficulty of observing beliefs on cognitions when there is no interaction between team members.

#### Research/Practical Implications

The new method will allow better measurement of TSA, providing the researcher with both qualitative as well as quantitative data.

#### Originality/Value

This is the first validated tool for assessing TSA in real life operational environment. Future research is devoted to developing a TSA probe technique based on the MBM theory.

### **Developing a team situation model in emergency management teams: The role of team learning behaviors**

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#### Purpose

Complex tasks, such as emergency management, are often executed by teams (Cooke, Salas, & Cannon-Bowers, 2000) because of their varied knowledge and expertise. The capability of creating a shared understanding of the task is argued to be crucial for team effectiveness (Salas & Fiore, 2004; Salas, Cooke, & Rosen, 2008), especially for teams facing high risks and having limited time. However, a shared understanding is often approached as a static instead of a dynamic team property. Moreover, it is questioned how shared understanding is developed.

This study investigates how the team situation model (TSM) of the task, a shared understanding of the situation developed by team mem-

bers moment by moment, influences emergency management team effectiveness. We investigate how team learning behaviors (co-construction and constructive conflict) influence the development of a TSM.

#### Design/Methodology

In an applied setting of 50 realistic emergency management teams (221 members) participating in exercises we measured the TSM and team learning behaviors during task performance.

#### Results

Teams with a shared TSM of the task are more effective. Teams that display more constructive conflict than co-construction succeed best in developing a TSM.

#### Limitations

We suggest developing a multiple measures design to study how not only TSM similarity but also TSM accuracy evolves over time.

#### Research/Practical Value

These results provide insight in essential behaviors of emergency management teams, and give direction to the training and evaluation of these teams.

#### Originality/Value

This study contributes to understanding how the TSM emerges during team cooperation.

### **Using hierarchical task analysis to identify different coordination requirements in paediatric emergency scenarios**

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#### Purpose

Coordination in medical teams is crucial for patient safety. But not in every situation the same behaviours are effective because the task defines the coordination requirements. The purpose of this study was to analyse spe-

cific tasks concerning their coordination requirements. We hypothesized that scenarios can be divided in phases where different coordination requirements are needed.

#### Design/Methodology

Using expert interviews and video analysis we conducted a hierarchical task analysis (HTA) for three paediatric emergency scenarios. Each scenario was described as a hierarchical structure containing general goals, sub-goals and the order of their execution. According to the goals scenarios were divided in phases for which clinical experts were asked to assign coordination requirements using the ANTS-System as a framework.

#### Results

We established detailed HTAs including coordination requirements for each scenario and were able to show that different phases indicated by HTA impose different requirements on the team.

#### Limitations

In some cases the focus of coordination requirements was too narrow because experts could not assign one specific team requirement to one goal. Thus we had to expand our definition of coordination requirements.

#### Research/Practical Implication

If we know which team requirements a specific scenario imposes we can design more effective trainings adapted to the task.

#### Originality/Value

In previous studies task analyses and identification of coordination requirements did not always follow a systematic procedure. Furthermore most studies about team coordination do not take in to account coordination requirement. We wanted to compensate for these deficiencies and deliver a systematic approach to identify team coordination requirements for specific tasks.



### **“Do you know something I don't know?” Evaluations of expertise predict coordination and performance in action teams**

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#### **Purpose**

Without any time for teambuilding, action teams are often forced to evaluate their teammate's skills and expertise within a few moments. Yet, based on these evaluations, teams must coordinate their joint task execution, for example, regarding who should be in charge. We investigated how evaluations of expertise influence coordination and performance.

#### **Design/Methodology**

Participants were 48 physicians and 48 nurses working together during an operation. The study had two measurement points. Immediately before the operation, participants rated their own and their teammate's expertise regarding nine specific areas. They also indicated their objective work experience and familiarity with their teammate. After the operation, participants completed a questionnaire on coordination and team performance. We calculated the squared Euclidean difference between self- and teammate evaluations of expertise as a measure of within-team expertise symmetry.

#### **Results**

We found that evaluations of expertise predict coordination ( $R^2 = .42$ ;  $p < .001$ ) and team performance ( $R^2 = .27$ ;  $p = .02$ ), even when controlling for familiarity and objective work experience. Interestingly, the importance of individual predictors varied. Whereas the evaluation of one's own experience predicts performance but not coordination, the opposite is true for teammate experience. Expertise symmetry is important for both outcomes.

#### **Limitations**

The non-experimental design prevents us from drawing causal inferences about the relationship between evaluations of expertise, coordination, and team performance.

#### **Research/Practical Implications**

Our findings highlight the importance of evaluations of expertise for coordination and team performance.

#### **Originality/Value**

Investigating healthcare professionals in their real work environment, this is the first study assessing the influence of expertise symmetry in action teams.

## **Adaptive Coordination in Teams: Reflexions and Further Developments**

Session Chairs: Ana Margarida Passos (Instituto Univ. de Lisboa (ISCTE-IUL)) [ana.passos@iscte.pt](mailto:ana.passos@iscte.pt)

Luis Curral (Faculdade de Psicologia, Univ. de Lisboa) [lcurreal@fp.ul.pt](mailto:lcurreal@fp.ul.pt)

#### **State of the Art**

Literature suggests that teams' ability to adjust coordination strategies to situational constraints is mandatory to ensure effective performance in complex environments. In spite recent findings on the dynamics between team adaptive coordination and performance, there are still several aspects that need clarification.

#### **New Perspectives**

This symposium adds to the literature by 1) addressing how team processes, boundary conditions and cognitive structures contribute to understand task coordination dynamics and team outcomes, 2) showing how adaptation can contribute to ensure patient safety, and 3) offering new perspectives on how to think team coordination dynamics in terms of team

process flexibility and complex adaptive systems theory.

#### Research/Practical Implications

The outcomes from this symposium contribute to enrich current literature on the topic as they show that a) there is a positive effect of interpersonal trust and in-process coordination with similarity of TSMs, and that the degree of similarity and team performance were positively associated, b) the shift from explicit to implicit task coordination, as well as its impact on performance and adaptation, is influenced by cohesion and virtuality, and that c) there is an optimum level of adaptation to ensure patient safety. Furthermore, the outcomes from this symposium also suggest that team effectiveness is sensitive to team process stability-flexibility, and e) that team emergence depends on task uncertainty.

### ***Presentations of the Symposium***

#### **I'm with you! Investigating the relationship between team situational models and performance**

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#### Purpose

A TSM is the mental representation associated with the dynamic understanding of a situation in which a team is embedded. Such representation is developed by team members in real time. In contrast to TMMs, TSMs are context-dependent and developed during task performance. Building on the framework suggested by Rico and colleagues (2008), we analyzed the influence of team longevity, trust, and perceived group efficacy on the similarity of TSMs. We expected these factors to be positively associated with the similarity of TSMs. Similarity, in turn, was expected to be

positively related to team performance and in-process coordination.

#### Design/Methodology

Data were taken from 242 individuals in 84 existing teams who regularly performed a complex, interdependent, and cooperative computer simulation. TSMs, team longevity, perceived team efficacy, and in-process coordination were measured via self-report in an online questionnaire. Trust and performance were assessed in a round robin design following a social network approach.

#### Results

Results show a positive relationship of interpersonal trust and in-process coordination with similarity of TSMs. Furthermore, the degree of similarity and team performance were positively associated.

#### Implications

Our results can be used for training development of teams working in a context demanding swift coordinating efforts.

#### Limitations/Originality

Further predictors suggested by Rico et al. (2008) were not included in this study, due to the cross-sectional design used. Additionally, generalizability of our results to real-life working teams remains to be tested. To our knowledge, this study is among the few recent research endeavors analyzing the relationship between TSMs and performance.

#### **Coordination in management teams: Do cohesion and virtuality really matter?**

*Pedro Marques Quinteiro (Instituto Univ. de Lisboa (ISCTE-IUL)) [pedromquinteiro@gmail.com](mailto:pedromquinteiro@gmail.com), Luis Curral (Faculdade de Psicologia, Univ. de Lisboa), Ana Margarida Passos (Instituto Univ. de Lisboa (ISCTE-IUL)), Ramón Rico (Autonomous Univ. of Madrid)*

### Purpose

This study aimed to understand how task explicit coordination positively predicts effectiveness (e.g. performance and adaptation) in management teams, through task implicit coordination. In addition, this study explores also the potential moderating role on the former relationship of other team processes (team cohesion) and some team boundary conditions, such as team virtuality.

### Methodology

45 self-managed teams enrolled in a 5 week management competition, were tasked with making decisions for managing a virtual company. In a multi-source and different wave effort, data were collected using weekly online questionnaires.

### Results

We found that while explicit coordination positively predicted team performance and adaptation, such relationship was fully mediated by implicit coordination. Cohesion had a detrimental effect on the indirect model, meaning that the higher the cohesion levels on the team the less it coordinate implicitly, impairing team performance and adaptation. Differently, team virtuality positively interacted with implicit coordination.

### Limitations

Data collection was done in a simulated environment and an extension of these findings to real work settings would strengthen our conclusions.

### Implications

Our findings suggest that adaptation and performance in management teams is mainly predicted by teams' ability to coordinate implicitly and that will be especially important in situations with high virtuality levels. On the contrary, cohesiveness might only be of interest until it reaches a certain level, after which it becomes harmful to team processes and outcomes.

### Originality/Value

This study shows how cohesion and virtuality contribute to team coordination dynamics and their impact on team outcomes (i.e. performance and adaptation).

### **Adaptive coordination development in student anesthesia teams: A longitudinal study**

Margarete Boos (Georg-August-Univ., Göttingen) [mboos@gwdg.de](mailto:mboos@gwdg.de), Ezequiel Fernandez Castela (Georg-August-Univ., Göttingen, DE), Sebastian Russo (Georg-August-Univ., Göttingen)

### Purpose

The aim of a previous study (Riethmüller, Fernandez Castela, Eberhardt, Timmermann & Boos, 2012) was to investigate the development of coordination mechanisms and their task-related adaptation in a longitudinal observation of medical simulation-based training of final-year students. We recorded six anaesthesia teams during a sequence of four task scenarios, each scenario comprised of a routine and a complication phase. After trained observers rated sub-tasks within each scenario for explicit and implicit coordination, analysis revealed a statistically significant effect of previous scenarios on coordination development in the routine phases. While the amount of explicit coordination decreased, implicit coordination increased, revealing adaptive coordination as a skill developed through repeated group interaction.

### Methodology

In this study, we took an even closer look at adaptive coordination, including reliable assessment of team performance. With this additional research, development patterns and the adaptation process were evaluated to provide valid information about appropriate coordination in routine as well as complication phases.

### Results

It appears that there can be an appropriate and an inappropriate rate and level of adaptation to ensure patient safety.

### Limitations/Implications

We discuss how conclusions from this study should be considered when designing new training concepts and improving existing ones. A conscious and appropriate shift between coordination mechanisms according to situational changes can be seen as an aim of such trainings.

### Originality/Value

This study contributed to clarify the dynamics of team adaptive coordination and their effect on team performance.

## **On the confluence of leadership and coordination in balancing stability and flexibility in teams**

*Gudela Grote (Swiss Federal Institute of Technology, Zurich) [ggrote@ethz.ch](mailto:ggrote@ethz.ch), Michaela Kolbe (Swiss Federal Institute of Technology, Zurich), Mary Waller (York Univ., Toronto, CA)*

### State of the Art

Effective teams in dynamic contexts must achieve a balance between stability and flexibility of coordinated action. To date the mechanisms supporting this balance are only partially understood.

### New Perspectives/Contributions

In order to further specify these mechanisms, we draw on the team leadership and coordination literatures and argue for their integration based on a framework that regards stability and flexibility as mutual enablers for team effectiveness. We also include structural mechanisms within which team leadership and coordination are embedded in order to develop a fuller understanding of team processes and outcomes.

### Research/Practical Implications

A team classification is proposed, distinguishing experiential, exploitation, exploration, and ambidextrous teams, and future directions for research derived from that classification.

### Originality/Value

Our framework offers a new perspective on how to think teams in terms of their stability-flexibility when using task coordination strategies.

## **Complexity and uncertainty in workgroups: How teams emerge when uncertainty increases**

*José Navarro (Univ. of Barcelona) [j.navarro@ub.edu](mailto:j.navarro@ub.edu)*

### State of the Art

Nowadays workgroups are considered as a good example of complex systems which have complex, adaptive behaviours. On the other hand, complexity science has proposed general behavioural rules for complex systems. One of these rules is the interplay between the complexity of the systems and the uncertainty of their environments: when uncertainty increases more complexity is necessary to cope with it.

### New Perspectives/Contributions

We will present a theoretical framework to understand the complexity-uncertainty interplay in workgroups. Workgroups as systems can be analysed regarding their level of complexity (e.g. level of interdependence among members). Workgroups are also interacting with some environments and the critical issue here is the tasks that the group has to do. These group tasks can be characterised as more or less uncertain. A critical interaction between workgroup complexity and group tasks uncertainty is proposed as the key point to understand the emergence of teams: to cope with high uncertainty tasks workgroups should work with high levels of interdepend-

ence in order to be effective. Here team forms emerge as the natural way to cope with the environment in an adaptive manner.

#### Research/Practical Implications

Workgroups processes and group tasks can be integrated in a more general socio-technical approach. Now workgroups can be analysed considering their levels of complexity, and the environment can be analysed considering its level of uncertainty.

#### Originality/Value

To consider teams as a specific workgroup form which emerges under certain situations. To include tasks as a critical determinant for the understanding of team behaviour

## Looking Inside the Box: Cognition as Way to Achieve Effectiveness in Work Teams

Session Chairs: Ana Margarida Passos (*Instituto Univ. de Lisboa (ISCTE-IUL)*) [ana.passos@iscte.pt](mailto:ana.passos@iscte.pt), Piet Van den Bossche (*Univ. of Antwerp*) [Piet.VandenBossche@ua.ac.be](mailto:Piet.VandenBossche@ua.ac.be)

#### State of the Art

Team cognition is a well-established research field. Concepts such as situation awareness, team mental models (TMM), and transactive memory systems (TMS) have been empirically studied in diverse work settings and regarding distinct team processes and outcomes. Nevertheless, there are several aspects that still need to be clarified.

#### New Perspectives/Contributions

With the outputs from this symposium and the studies within we expect to answer to some still not clarified questions. More specifically, the symposium contributes to team cognition research by 1) providing an account of team situation construction over time, 2) investigating the interaction between temporal-TMM accuracy and similarity on team learning and adaptation, and 3) investigating

interactions between teams' cognitive structures (TMS) and learning, and social-cognitive processes (i.e. team reflexivity).

#### Conclusion and Implications for Research/Practice

Findings from these four studies shed new light on the importance of team cognitive structures for team performance and adaptation in complex environments, as they show that a) effective communication patterns for team decision making in complex dynamic situations are sensitive to team situation awareness; b) in addition to similarity, TMM need to be accurate in order to foster effective learning and adaptation; c) self-leadership strategies positively contribute to increase the interaction effect between TMS and reflexivity on team adaptation; and d) TMS help to improve the positive impact of team feedback and reflection behaviors on performance growth.

## Presentations of the Symposium

### Team situation awareness development and decision making in crisis management teams: A communication perspective

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#### Purpose

Previous research has indicated the importance for crisis management teams to rapidly construct, share, and maintain an appropriate understanding of their task situation-in other words, to establish team situation awareness. In this paper, we use a communication perspective to assess the formation of this team situation awareness.

#### Design/Methodology

Based on a detailed study of communication in 12 multidisciplinary crisis management

teams, we track the emergence of distinct communication episodes as well as significant differences between high- and average-performing teams in the management of communication, the formation of team situation awareness, and decision making during these episodes.

#### Results

Compared to average-performing teams, high-performing teams spent more time in an initial information sharing phase and then make decisions more rapidly in the subsequent decision making phase. Moreover high-performing teams engage in significantly more collective interpretation processes during the decision making phase.

#### Limitations

Although we had unique data of crisis management teams performing a simulation exercise, the study only involved a small number of teams.

#### Research/Practical Implications

The study emphasizes the importance of effective communication patterns for team decision making in complex dynamic situations.

#### Originality/Value

The study uses a unique dataset of highly experienced functionally diverse members to test hypotheses on situation awareness development and decision making under challenging circumstances.

### **The impact of similar and accurate temporal mental models on team learning and adaptation over time**

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#### Purpose

This study aims to investigate the influence of similar temporal-team mental models (TMM)

on team adaptation through team learning depending on different levels of temporal-TMM accuracy over time.

#### Design/Methodology

The participants of this study consisted of 68 teams (334 individuals) enrolled in a management competition. We collected data at three different moments of time through questionnaires. We conducted path analysis to test for moderated mediation.

#### Results

The results supported a moderated mediation showing that when teams have high levels of temporal-TMM accuracy the influence of temporal-TMM similarity on team learning and team adaptation is negative.

#### Limitations

We only measured the temporal dimension of TMM. It could be important to measure task and team TMM and analyze the impact of the three TMM dimensions.

#### Research/Practical Implications

Our findings show the importance of studying the joint effect of TMM accuracy and similarity on team adaptation. Moreover, our study shows the importance of the temporal dimension of TMM. This study reveals that team members need to have accurate TMM, but simultaneously share and discuss ideas, especially when something unexpected happens, to promote learning and team adaptation.

#### Originality/Value

Our study reveals surprising results showing that when teams have high levels of temporal-TMM accuracy the influence of temporal-TMM similarity on team learning and team adaptation is negative. However, our study demonstrates that it is really important analyze accuracy, because if TMM are not accurate, team members can share incorrect TMM and adjust their processes and behaviors in



such a way that will certainly have negative implications for team effectiveness.

### **Adaptive performance in hospital teams: When group process, cognitions and competences matter**

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#### **Purpose**

This study aimed to understand whether adaptive experience predicts adaptive performance in hospital teams. Furthermore, this study also aimed to understand how this effect was influenced by team reflexivity, transactive memory systems and self-leadership.

#### **Methodology**

72 hospital teams participated in this study. Team members were asked to provide information regarding their transactive memory system, and self-leadership skills. Team leaders were asked to report their teams' experience in performing adaptively, the frequency of reflexive behaviors, and the efficacy of adaptive performance.

#### **Results**

Adaptive experience positively contributed to predict adaptive performance. Team reflexivity partially mediated this relationship and the combined interaction between reflexivity, transactive memory systems and team member self-leadership had an incremental effect on team adaptation.

#### **Limitations**

Data collection was done using only questionnaires (single method data collection), and no objective measure was included (although responses were obtained from both team members and team leaders).

#### **Implications**

Our study shows the importance of reflexivity to understand how teams transfer knowledge from past experiences to new events, and how transactive memory systems and self-leadership skills facilitate this transference process.

#### **Originality/Value**

So far, little empirical connections had been made between adaptive behavior and reflexivity. In this study, we not only did so as we showed how important reflexivity is for the adaptive process. Furthermore, our findings open new research streams as they suggest that teams whose team members have a certain amount of behavioral competences (i.e. self-leadership) might use their cognitive resources differently.

### **The effect of guided team reflexivity upon feedback and transactive memory systems on team performance development: A comparative experiment**

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#### **Purpose**

Previous work has identified feedback as a powerful lever to improve performance. It is argued that teams need to process feedback in order to capitalize on it. We propose that team reflexivity grasps this feedback processing behavior. Additionally many studies have shown that teams perform better with a stronger TMS, probably due to a better planning and problem solving. We argue that feedback followed by guided reflective practice and TMSs change contribute to team performance growth.

#### **Design/Methodology**

In a multiple-measures experiment 210 individuals were assigned to 105 two-person newly formed teams to complete a flight simula-

tion task (four successive missions) under one of three conditions: a performance feedback group, a guided reflexivity and feedback condition, and a no feedback group.

#### Results

The results revealed that the combination of two components, feedback and reflective instructions, appears to be necessary to optimize feedback subsequent effect. Moreover, we demonstrated that teams experiencing a gain of score on their TMSs improved their performance faster.

#### Limitations

The artificial and temporal nature of the team and the limited number of team members are potential limitations.

#### Research/Practical Implications

Team feedback should be designed in a form that stimulates teams to optimize an effective implementation of changes through reflection on task completion, teamwork, and team members' expertise.

#### Originality/Value

The present research had advantages: a longitudinal design, a comparative approach with a control group, objective measures of team performance, and the combination of socio-cognitive factors to account for performance changes.

## Shedding Light into a Black Box: New Perspectives on Team Processes and their Influence on Team Effectiveness

Session Chair: *Michael Josef Burtscher (Univ. of Zurich, CH) [m.burtscher@psychologie.uzh.ch](mailto:m.burtscher@psychologie.uzh.ch)*

#### State of the Art

Team processes represent those interactions of team members that convert inputs into outcomes of teamwork. Hence, understanding team processes is vital for predicting team

effectiveness. Whereas classic Input-Process-Outcome-Models have a generic concept of team processes, new approaches call for more elaborated and dynamic perspectives. This includes distinguishing processes from cognitive and affective states, focusing on observable behaviour, and emphasizing the role of time. To be able to investigate team processes in more detail, researchers have to go beyond using questionnaire data. Instead, a combination of different methods – both in terms of data collecting and data analysis – is needed.

#### New Perspectives/Contributions

In this symposium, we present four studies that offer new insights on the relationship between team processes and team effectiveness. In particular, these studies scrutinize different team processes by using novel theoretical and methodological approaches. Graça and Passos use latent growth modelling to investigate the influence of transition team leadership on team action processes over time. Hámornik et al. relate communication patterns in medical rehabilitation teams to patient satisfaction. Based on video recordings of nuclear power plant operation teams, Soós et al. analyze how these teams adapt effectively to different levels of task-load. Finally, Burtscher and Meyer show how regulatory focus framing can be used to improve team information processing and decision-making.

#### Research/Practical Implications

We discuss several new avenues for research on team processes, which contribute to a better understanding of what makes teams effective. This symposium was organized as a result of the EAWOP Early Career Summer School 2012.

### *Presentations of the Symposium*

**As time goes by: A longitudinal study about the role of team leadership on team action processes**

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#### Purpose

This study aims to examine the impact of leadership on team action processes over time. More specifically, we tested whether team leadership functions at the beginning of team task episodes influence team action processes trajectories.

#### Design/Methodology

241 teams participated in a management competition over five weeks. A team leader was assigned before each competition. We collected data using questionnaires on different time points: transition team leadership functions were measured at the beginning and team action processes were measured at the beginning, middle and end of the competition.

#### Results

A latent growth model estimated on MPlus revealed good fit. Results showed that leadership transition functions had a significant effect on the latent factor representing the change of team action processes (i.e. slope).

#### Limitations

One possible limitation is the use of a management simulation to collect data that may not represent reality in a reliable way.

#### Research/Practical Implications

The importance of the initial leadership phase for the next task cycles of team action processes claims the attention that leaving transition leadership functions to chance can compromise team processes and therefore team effectiveness.

#### Originality/Value

Despite the theoretical knowledge that transition leadership functions are the foundation on which future team actions will be performed, this relationship has not been empiri-

cally tested. We also used a different data analysis approach (latent growth model) to test this hypothesis.

### **Patterns of communicative behavior in medical rehabilitation teams**

Balázs Péter Hámornik (Budapest Univ. of Technology and Economics, HU) [hamornik@erg.bme.hu](mailto:hamornik@erg.bme.hu), Márta Juhász (Budapest Univ. of Technology and Economics, HU), Ildikó Vén (National Institute for Medical Rehabilitation, HU)

#### Purpose

The study aims to describe the pathways of information sharing in interdisciplinary medical rehabilitation teams to facilitate a better care.

#### Design/Methodology

We conducted a field study of observations and surveys in a ward for traumatic injured patients. 17 members of the ward participated in the research. The medical rehabilitation teams were formed around each 51 patient. We registrated the incoming and outgoing communicative behavior including its topic. The frequency of usage of information agents and the sequences of information flow were analyzed. We are aiming to predict the patient satisfaction from the team's communication pattern and features.

#### Results

We have found dominance in the usage of human information agents compared to paper-based and electronic sources. The sequence of communicative behavior on the ward round revealed a patient-centered discourse and the main non-human agents were the paper-based tools. The topics were focused only on ward-related care. We found correlations between the patients' satisfaction and the perceived knowledge level of the physiotherapist.

#### Limitations

We included an extensive patient sample but the results are based on one ward's data.

#### Research/Practical Implications

The field study revealed the usage of the computer system and digital information agents less frequent. The physiotherapist perceived as the closest care provider in the team and related to satisfaction. In the future implications the sharing of non ward-related topics and the activity of the nurses should be facilitated by teamwork support solutions.

#### Originality/Value

This is an introduction to a novel subject of research on non-acute medical teams derived from experiences in other high-risk fields.

### **Efficient and economical forms of team processes**

*Juliánna Soós (Budapest Univ. of Technology and Economics, HU) [soosj@erg.bme.hu](mailto:soosj@erg.bme.hu), Márta Juhász (Budapest Univ. of Technology and Economics, HU)*

#### Purpose

The research aims to study key team processes, through which the team members share their individual knowledge, create shared understanding of the team, situation, task, leading to high team performance. The current research also aims to understand how teams adapt with team processes to high task load situation.

#### Design/Methodology

Video recordings of Nuclear Power Plant operator teams' activity have been used for collecting and analysing data. 16 operator teams had to follow the selected same scenario, including 96 team members' interaction. The performance scores were made by the instructors' evaluation. Team process categories were developed based on different theoretical, empirical frameworks of team processes and semi structured analyses of transcribed communication and video recordings.

#### Results

Specific forms of team processes help team members to build a shared conceptualization of the faced problems, thus lead to higher team performance, such as: providing directions, summarizing, projecting to the future, coherent information flow. Economical forms of team processes may help to lessen and manage high task load situation.

#### Limitations

Team performance evaluations were based on subjective assessments of performance. The study lacks explicit team knowledge measurements.

#### Research/Practical Implications

The revealed team process categories may serve as a valuable input for team members' social skill focused selection and development methods.

#### Originality/Value

The study aims to capture team processes in a naturalistic and complex work environment. The analyses reveal how good performing teams manage unpredictable high task load situation with team processes from information, knowledge sharing perspective.

### **Promoting good decisions: Regulatory focus affects team information processing and decision-making**

*Michael Josef Burtscher (Univ. of Zurich, CH) [m.burtscher@psychologie.uzh.ch](mailto:m.burtscher@psychologie.uzh.ch), Bertolt Meyer (Univ. of Zurich, CH)*

#### Purpose

A variety of factors have been proposed to explain the shortcomings of team and group information processing and decision-making. These factors, however, are generally hard to modify. The current study proposes a remedy for this dilemma. Applying regulatory focus theory to decision-making teams, we suggest that framing a task accordingly represents a

feasible method for improving how teams process information and make decisions.

#### Design/Methodology

In the present experiment, 60 three-person teams had to solve a sequence of five decision-making tasks, which were all based on the “Stranded in the Desert”-Scenario. Regulatory focus was manipulated via the pay-off scheme. Teams were randomly assigned to one of the two experimental conditions (promotion focus vs. prevention focus)

#### Results

In line with our hypothesis, we found that regulatory focus predicted the quality of team decisions ( $\beta = .27$ ,  $t(58) = 2.10$ ,  $p = .04$ , two-tailed, 95% CI [0.04, 1.49]). Teams in the promotion focus condition solved on average more tasks correctly ( $M = 79.68\%$ ,  $SD = 14.26$ ) than teams in the prevention focus condition ( $M = 72.07\%$ ,  $SD = 13.73$ ). Moreover, information processing behavior on the team-level mediated the effect of the regulatory focus manipulation on team decision quality.

#### Limitations

The study used ad hoc teams consisting of students.

#### Research/Practical Implications

Framing of team decision-making as prevention or promotion task could be applied in various settings.

#### Originality/Value

We propose a potential remedy to overcome bias in team decision-making and provide initial support for its effectivity using behavioral data and objective measures of team performance.

## New Avenues in Diversity Faultline Research: Novel Processes, Outcomes, and Measures

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#### State of the Art

More than fifty years of research on the consequences of team diversity to the functioning of work teams have produced largely inconsistent results as new meta-analytic evidence suggests. No measure of team diversity that quantifies the diversity of a single attribute (such as age or gender) has produced consistent outcomes across different contexts.

However, the construct of diversity faultlines – hypothetical dividing lines splitting a team into homogeneous subgroups based on several diversity attributes – has received a lot of attention recently: New meta-analytic findings suggests that strong faultlines are associated with negative outcomes for work teams across contexts and organizations.

#### New Perspectives/Contributions

This symposium showcases the current developments in European faultline research. Five groups from four countries present new findings on how faultlines affect team- and individual-level outcomes. The four empiric papers, all of which employ multi-source samples from real work teams, shed new light on the processes underlying the negative effects of faultlines and show how novel interventions, such as specific types of leadership, can help to circumvent their detrimental effects. The fifth methodology paper presents new ways for measuring faultlines and showcases a new free open source software for calculating diversity faultline measures.

### Research/Practical Implications

The presentations could spur future research on an integration of the proposed processes into one conceptual model of diversity faultlines.

Practitioners can learn how faultlines affect team performance, how faultlines can be measured, and what can be done to circumvent their detrimental effects.

### ***Presentations of the Symposium***

#### **Linking diversity faultlines to team performance: Exploring the role of task interdependence**

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#### Purpose

In explaining the equivocal impact of diversity on team performance, researchers have recently begun to explore two contingencies of diversity effects: faultlines and context. The present study follows this stream of research by 1) investigating the performance impact of task-relevant faultlines based on educational level and conscientiousness; and 2) exploring the moderating role of task interdependence.

#### Methodology

Team members of 44 teams in ten Belgian organizations were surveyed regarding all study variables, except for team performance, which was rated by team leaders.

#### Results

Preliminary results suggest that faultlines are only detrimental for team performance when team tasks are highly interrelated (i.e., high task interdependence). In contrast, when task interdependence is low, strong faultline

groups do not perform worse than weak faultline groups.

#### Limitations

While drawing on the categorization-elaboration model (CEM) for theoretical predictions, the present study has not empirically verified the underlying mechanisms implied by this model. In addition, future research should simultaneously examine the role of other task-relevant factors, such as task autonomy, along with task interdependence.

#### Practical implications

Our results suggest that managers may prevent the detrimental effect of faultlines by 1) paying attention to potential subgroup formation in team placement decisions; or by 2) altering the team's task structure.

#### Value

The present study extends faultline research in three ways: 1) its combination of demographic and non-demographic faultline attributes; 2) the contextualization of faultline effects by examining the role of task interdependence; and 3) its research design which involves an applied setting and a supervisor-rated outcome measure.

#### **Age/gender faultlines and team innovation behavior – Exploring the role of differentiated leadership behavior**

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#### Purpose

Demographic age/gender faultlines might be a risk for the for the innovation behavior especially in teams working in the R&D sector of companies. Therefore, our research investigates differentiated leadership behavior—defined as differentiation of the individual dimensions (individual consideration, intellectual stimulation) of the transformational lead-



ership construct (Wang & Howell, 2010; Wu et al., 2010)—as an intervention strategy to at least buffer the negative implications of these faultlines on innovation behavior.

#### Design/methodology/approach

Study hypotheses are tested among a multi-source sample of 89 R&D teams from a German automotive company applying regression techniques.

#### Results

Age/gender faultlines are found to be strongly negative related to innovation behavior in R&D teams. This effect however is buffered by high levels of differentiated leadership behavior in these teams. These effects also hold, when controlling for collective focused leadership behavior as a competitive moderator.

#### Limitations

Hypotheses were tested in a cross-sectional data set, which does not allow for conclusions of causality.

#### Practical Implications

Differentiated leadership is identified as promising leadership strategy to preserve innovation behavior in demographically diverse teams.

#### Originality values

In contrast to the existing diversity literature, which proposed collective focused leadership behavior as the most valuable leadership behavior in diverse teams (e.g., Kearney & Gebert, 2009; Kunze & Bruch, 2010), we argue that in teams with strong age/gender faultlines a differentiated individual leadership behavior, valuing the individual strengths of each employee might be more promising strategy to at least buffer the negative effects on innovation behavior.

### **That's not my place: The effect of group faultlines on individual denial of responsibility and the moderating role of social competence and skill variety**

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#### Purpose

This study examines how diversity faultlines and their interaction with social competence and skill variety are associated with the frequency of team members' denial of responsibilities during an optimization task.

#### Design/Methodology

In a sample of 45 real workgroups observed during an optimization task, verbal denials of responsibilities were behavior-coded. Team faultlines were based on age, gender, level of schooling, and level of formal training.

#### Results

In line with the hypotheses, multilevel modeling revealed that stronger faultlines led to more denial of responsibilities. This effect was reduced if team members either had high social competence beliefs or perceived high levels of skill variety.

#### Limitations

Future research should test additional variables and mediators that can explain the complex relationship between faultlines and the denial of responsibility. Furthermore, future research should test if our results are also valid for teams with a white collar background and for different diversity characteristics

#### Research/Practical Implications

Many studies have shown that strong faultlines can provoke negative team outcomes. Our results show that faultlines can also be associated with specific behaviors on the individual level. Furthermore, we extend knowledge on the detrimental effect of faultlines by proposing two novel individual-level

moderators, social competence and perceived skill variety, as being able to attenuate the negative effects of faultlines.

#### Originality/Value

We had the rare opportunity to observe real interactions in real work teams. Interactions were behavior coded and the relationships between faultlines and the denial of responsibility was tested for the first time.

### **How do faultline teams learn? Exploring the roles of climate for participative safety and change-oriented leadership**

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#### Purpose

The study examines the conditions promoting learning in faultline-based healthcare teams. We argue that team climate for participative safety (TCPS) and change oriented leadership (ChOL) foster team learning (TL) behaviors among team members, which positively relates with team performance.

#### Design/Methodology

Hypotheses were tested with a cross-lagged panel design on a multi-source sample of 78 healthcare teams from different hospitals. Employees' socio-demographic data was provided by the HR departments, team members rated team process-related variables, and team supervisors assessed team performance.

#### Results

Preliminary analyses reveal that: a) TL behaviors mediate the relation between faultlines and performance, b) faultlines are negatively related with TL, and c) this relation is mediated by TCPS. Furthermore, the negative relation of faultlines with TL is strong with low levels of ChOL, whereas it becomes non-significant with high levels of ChOL. This find-

ing suggests a moderating effect of ChOL on the faultlines-TL-performance chain.

#### Limitations

Longitudinal data could provide stronger evidence on how the studied relationships change over time.

#### Research/Practical Implications

Our results provide managers with useful insights on how to enhance the learning process of faultlines healthcare teams by creating a climate of participative safety within their teams and using a more change-oriented leadership style.

#### Originality/Value

Our study contributes to diversity faultlines literature by: a) extending current knowledge on how team faultlines reduce team performance (i.e., TL and TCPS), and b) uncovering the moderating role of ChOL in the faultlines-TL-performance chain, thus showing how faultline teams can learn and perform effectively when ChOL and TCPS exist.

### **A computational comparison of faultline measures: Overcoming current limitations with a new measure for multiple subgroups and individual-level faultlines**

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#### State of the Art

Diversity faultlines – hypothetical dividing lines splitting a team into homogeneous subgroups – have received substantial attention in recent diversity research. We review the available faultline measures with regard to their properties and identify several limitations.

### New Perspectives/Contributions

A comparison of six measures with simulated data sets with varying group sizes, numbers of subgroups, and numbers of attributes reveals further issues, especially if more than two subgroups are present. Factor analysis reveals that the measures measure different constructs.

We thus propose a new cluster-based measure based on the average silhouette width (ASW). We evaluate its properties with simulated data sets and compare it with existing measures, also under missing data conditions. The new measure overcomes some prior limitations and also allows calculating an individual-level measure that quantifies an individual team member's view onto the faultline structure of the team.

### Research/Practical Implications

Faultline researchers need to carefully choose the measure for quantifying faultline strengths, because under some circumstances, some measures may produce erroneous results. Some prior findings should be re-investigated.

Researchers and practitioners will benefit from the open-source software for calculating all investigated measures that is available in the supplemental material of the paper.

### Originality/Value

The new method is suitable for contexts where faultlines could not be calculated previously due to methodological limitations, i.e., for group sizes beyond 16 members, for groups with more than two subgroups, and for designs investigating individual-level outcomes. The new method therefore allows the calculation of faultlines in new areas of W&O research.

## Position Papers

### Putting the Type Back Into Teams: Multi-Professional Teams and Resilience

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#### State of the Art

Research on teams often concerns teams within single organizations. In addition the difference between types of team is frequently elided. However Multi-professional teams are those that draw on expertise across professional and organizational boundaries. This type of team is increasingly deployed, for example, to provide more flexible service delivery in client-centred social care provision, in the context of managing pupil-centred educational special needs, and in dealing with disasters through emergency response teams. In most of these contexts the teams in question operate in demanding and difficult circumstances, where team functioning is placed under strain, and where it is vital that the interests and safety of those being helped are safeguarded through team resilience. We distinguish between multi-disciplinary and inter-professional teams and propose that resilience is first and foremost about maintaining or regaining team performance (outputs and delivery) in, or following, difficult or adverse circumstances. Our aim is to identify why and how multi-disciplinary and inter-professional teams may be particularly vulnerable to stressful circumstances, leading to their potential malfunction.

In discussing the organization of public sector service provision Wilson & Pirrie (2000) identified a number of economic, practical and professional factors 'driving' the movement towards multi-professional team working. These included: changes in working practices requiring members of different professions and occupations to work together; a focus on the

end-user and the development of concepts of a 'seamless service' and 'joined-up' policy; increased demand from both potential and actual service users; and a desire to ensure that public services are delivered efficiently thus minimising duplication and waste. The latter in particular chimes in with current economic imperatives.

It is notable that despite the rise to prominence of team-based organizations and delivery, research into the resilience of teams has barely begun (West, Patera & Carsten, 2009). Yet in current economic conditions the new ways of delivering services focussed on the end-user, often entailing the collaboration of erstwhile disparate companies and personnel, have resulted in organizations and systems with changed structures and teams operating in significantly difficult circumstances. Whereas the theme of organizational change and how to manage it dominates the management literature, from models of staged approaches (Lewin, 1947; Kotter, 1992 ; Kanter, 1992) frameworks (Bolman and Deal, 2008) metaphors (Morgan, 2000) to learning (Argyris, 1990; Senge, 1990), there has been a pre-occupation with managing individual resistance to change (Connor, 1995) and the capacity of individuals to survive change (Kets de Vries, 1997), rather than on team-working in the potentially adverse circumstances produced during transition and beyond.

The recent publication in the UK of two serious case reviews into the death of 'Baby P' (Peter Conolly, see DOE, October 26th, 2010) exposed flaws in inter-professional collaboration, poor professional practice and fundamental system failure at key points.

These observations highlight aspects of team processes that may be especially critical to effective multi-professional team functioning. Thus we believe that not only is the issue of team resilience important to understand, but that considering it from the perspective of

multi-professional teams is likely to provoke a richer understanding of the issues involved, as well as providing an analysis of the processes germane to multi-professional team effectiveness.

#### New Perspective/Contribution

A common definition applied to teams within particular organizations and companies is a group of people working together to achieve a common goal (e.g. Guzzo & Dickson, 1996). Despite analyses distinguishing between different types of team (e.g. Cohen & Bailey, 1996) most research on teams has preferred to elide the issue in favour of drawing general conclusions about team processes and contexts (e.g. Mathieu, Maynard, Rapp & Gilson, 2008). Thus we believe our paper is the first to capitalise on a distinction in team type made within the general rubric of multi-professional team that has important consequences for team processes involved in resilience.

The term 'Multi-professional' covers teams variously described as multidisciplinary and inter-professional. There is, however, some ambiguity about the nature of multidisciplinary and inter-professional team-working which we address first before delineating dominant characteristics for each team type.

Malin and Morrow (2007, 449) describe multidisciplinary teamwork as "where two or more professionals from different disciplines work together or co-exist alongside each other but separately from each other". Leathard (1994, 6) notes the term is usually used to describe a team of individuals from different professional backgrounds "who share common objectives but who make a different but complementary contribution to practice".

Wilson & Pirrie (2000), however, argue that the evidence from the literature indicates that 'multi' describes activities which: bring more than two groups together; focus on complementary procedures and perspectives; provide

opportunities to learn about each other; are motivated by a desire to focus on clients' needs; and develop participants' understanding of their separate but inter-related roles as members of a team.

In contrast, Wilson & Pirrie conclude 'inter' is more appropriately used when the activity enables members of the team to: develop a new inter-professional perspective which is more than the sum of the individual parts; integrate procedures and perspectives on behalf of clients; learn from and about each other; reflect critically on their own knowledge base; engage in shared reflection on their joint practice; surrender some aspects of their own professional role; share knowledge; and develop a common understanding.

We extend the above to characterise multi-disciplinary team functioning as essentially role-based, and inter-professional team functioning as essentially relation-based. We then draw up a taxonomy of team processes based on the team effectiveness literature to demonstrate that these two types of team are vulnerable in different ways to stressful and difficult circumstances and so building resilience will require a different approach to each team type.

#### Conclusion and Implications for Research/Practice

Building resilience will require a different approach in Multi-disciplinary and Inter-professional teams. When considering teams from a resilience perspective team type becomes important.

### Engaging with Diversity of Social Units – A Social Identity Perspective on Diversity in Organizations

***Winner of the Dissertation Award of the Section Work, Organizational & Business Psychology, German Psychological Society:***

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#### State of the Art

Theoretically, there are unlimited ways in which the members of a group can differ – in more obvious characteristics, like age or gender, and in less obvious characteristics, like experience or education. The term diversity designates the fact that there are and the degree to which there are such differences between members of a particular social unit.

Organizations are increasingly confronted with diverse workforces and markets. They are subject to demographic developments in their societal environment. Operating on a global scale brings about the need to manage (in) different cultures. The use of cross-functional work teams and interdisciplinary project teams is another reason for the increasing diversity of modern organizations.

Until the early 1990s, organizations reacted to diversity mainly from an equal-treatment and non-discrimination perspective. The goal was to treat everyone fairly and to fight discrimination. By the early 1990s, a new perspective emerged: "the business case for diversity". Under this new perspective, diversity is seen as an asset that can be used to increase the bottom line. The aspirations tied to diversity under this perspective are plenty. Among the most prominent is the idea that diversity leads to more innovation and better problem solving through the inclusion of different and challenging perspectives. Nonetheless, negative side effects of diversity – e.g. conflicts, discrimination – are still very much present nowadays. Together these positive and negative

effects of diversity make it crystal clear that managing diversity is an important topic in modern organizations and that there is a great demand for appropriate methods to do so.

The good news is that there is already decades worth of research on diversity in workgroups and organizations. The bad news is that an abundance of reviews of this literature show that diversity can have both positive and negative effects, and that it is still hard to predict under which circumstances what kinds of effects will occur. During the last years, more and more studies are conducted to address this problem by trying to identify moderators and mediators of diversity's effects. In my work, I aim to contribute to these inquiries by adding a distinctively subjective perspective on diversity.

#### New Perspective/Contribution

The basic assumption behind my work is that, through direct or indirect engagement with diversity, people acquire an understanding of what role a particular form of diversity plays in the groups they are part of. This understanding can be represented either as individual beliefs about diversity or as group climate regarding diversity. These beliefs and climates provide a vantage point from which people engage with diversity in the future.

The two main research questions I seek to answer in this respect are: (a) Does the role diversity is given in a particular context – e.g. whether it is considered beneficial or detrimental to the group's goals – have any effects on groups and members? (b) What are the mechanisms that bring about these effects? Using a social identity perspective, I addressed these two research questions from three different perspectives:

To address the first research question, we meta-analyzed all available evidence on the effects of diversity beliefs and diversity climates on a broad range of relevant outcome

variables. There are two kinds of such effects. First, diversity beliefs and climates can be thought of as moderators, influencing the relationship between diversity and various outcomes. The basic idea being that diversity will have positive effects if people expect it to be a good thing. The accumulated evidence speaks in favor of this assumption. Second, a little more unconventional, another meta-analysis revealed that diversity beliefs and climates can also have direct effects on a range of outcomes – that is, irrespective of the degree of diversity present. Both moderator and direct effects show a considerable heterogeneity across studies, pointing to the importance of studying the processes behind these effects more closely.

These processes were the focus of two field studies, in which we tested the assumption that the effects of diversity beliefs and climates are energized or “driven” by the identification with the organization for which diversity is seen as a good or a bad thing. We furthermore assumed that there can be both appreciation for similarity and diversity present at the same time. Finally, we assumed that organizational identification can lead to two distinct forms of solidarity, one based on diversity, the other based on similarity. Both forms should be beneficial for cooperation within the organization. One study was conducted in a Taiwanese hospital, the other in a German university. The results were in line with the model.

Taking another perspective on the processes behind the effects of diversity beliefs and climates, the final part of my dissertation contains a new theoretical model. In this model an emotional pathway underlying the effects of diversity on performance is outlined. The model is thought to complement other more cognitive approaches and rests on the basic assumption that, given certain favorable



circumstances, diversity can stimulate empathy towards fellow group members. Empathy, in turn, has various beneficial effects on group and individual functioning. Diversity beliefs and climates take the role as superordinate second order moderators in the model.

#### Conclusion and Implications for Research/Practice

All three different strands of my work provide empirical and theoretical support for the proposition that it does indeed matter what people think about diversity. However, the results were fairly heterogeneous and the effects are by far not as trivial as it might appear at first glance. There is still much to be learned about the way people engage with diversity and the effects of this engagement.

From a practical perspective, this line of work implies that the implementation of diversity trainings, policies, etc. is the apt thing to do and that a change from the anti-discrimination to the business-case perspective on diversity promises to be worthwhile. The results also point out that diversity management requires managing the organization's identity, both with respect to the role of diversity and similarity. It also requires fostering the identification with the organization.

#### Single Papers

##### **When emergent hierarchy and group competence influence group performance**

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#### Purpose

In the last two decades, it has become apparent that organizations are moving from more hierarchical to rather flatter hierarchical structures. In other words, at the work group level, group members possess equal power and have often no assigned leader. However, in newly formed groups, hierarchies emerge readily. We intended to investigate whether such emerging (informal) hierarchical structures are beneficial for group performance (Hypothesis 1). According to Expectation States Theory emergent dominance hierarchies are formed around individual group members' competence differences. This process enables the most competent group member to influence the group the most. We, therefore, predicted that the more the dominance hierarchy within a group corresponds to the competence differences of the individual group members, the better the group performs (Hypothesis 2). Also, we assume that increased levels of individual task-competence within a group lead to higher group performance (Hypothesis 3).

#### Design/Methodology

Twelve three-person groups and 28 four-person groups were investigated, solving the Winter Survival Task. Emergent hierarchy was measured based on the perceived dominance ratings among group members.

### Results

While emerging hierarchies and the mean level of individual task-competence in the group increase group performance the alignment between task-competence and dominance did not have an impact on group performance.

### Limitations

Future research might want to focus on how emergent hierarchies influence group performance in other than decision making tasks.

### Implications/Originality

Emergent hierarchies are beneficial for group performance and although they were created around individual group members' competence in our study, this correspondence was not a necessary prerequisite for better group performance.

### Effects of accountability on the solution of hidden profiles

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### Purpose

In organizations, decision-makers are often held accountable for the outcome of their decisions in order to make sure that they decide carefully and responsibly. However, previous research has shown that such outcome accountability can have unexpected detrimental effects on the quality of judgments and decisions, whereas accountability for the decision process sometimes improves decision quality. In the present study, we investigated whether such effects extend to a particularly important group decision making task, namely a so-called "hidden profile". In a hidden profile, bringing together diverse expertise from different group members can lead to syner-

getic gains in decision quality, but these gains are often not realized.

### Design/Methodology

Participants were induced to be accountable for either the decision process, the outcome, or both, or were assigned to the control group (no accountability). They first received individual information about a decision case and were subsequently presented with a protocol of a simulated group discussion. Due to the information exchanged during this discussion, an alternative that they initially had not preferred turned out as the best one (hidden profile).

### Results

Analyses showed that the solution rate in the hidden profile was lower for participants who were accountable (independent of type of accountability) compared to participants who were not accountable.

### Limitations

Simulated group discussion instead of real group discussion.

### Research/Practical Implications

When assigning accountability it should be taken into consideration that accountability can decrease decision quality in the context of diverse expertise.

### Originality/Value

This is the first study to investigate how outcome accountability affects decision quality in a hidden profile situation.

### Biased recall as an explanation for preference-consistent evaluation of information in group decision making

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### Purpose

In group decision making group members often persist with their pre-discussion preference, even when the pooled information shows it to be suboptimal. This is, in part, due to group members mentioning information in favor of their preference more often. Previous research has shown that preference-consistent information is mentioned more often because of an evaluation asymmetry: group members believe preference-consistent information to be more accurate. In this study, we investigated a complementary mechanism, namely a memory-based asymmetry. Specifically, we tested whether preference-consistent information is remembered more easily.

### Design/Methodology

Participants were led to believe that they would work on a personnel selection case study in groups of three. Prior to the group discussion they read the description of two applicants and stated their preliminary preference. After a short distraction task participants were asked to write down all information about the two candidates they could remember. Upon finishing the recall, the experiment ended.

### Results

Participants remembered significantly more preference-consistent information than inconsistent information.

### Limitations

Although unlikely, that some participants saw the recall task as an opportunity to collect arguments for the supposedly following discussion and did not write down all arguments they could remember, but only those they intended to use in the discussion.

### Research/Practical Implications

Further experiments should address the question how the investigated memory effect influences information exchange in actual group

decision making. If it contributes to the dominance of preference-consistent information, memory-based interventions should be developed to increase group decision quality.

### Originality/Value

Memory-based asymmetries have not yet been studied in the context of preference-consistent information sharing.

## **Proactive behaviour of teachers for school development – Research on antecedents at individual and at school level**

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### Purpose

To accomplish innovation in schools, teachers need to proactively promote the development of their schools. Yet, little is known about factors influencing proactive behaviours as regards school development. Drawing on research on organisational citizenship behaviour, we investigated whether teacher-level factors in comparison with school-level factors contribute to teachers' proactive behaviours with regard to school development (frequency of cooperation, ratio of time in committees, ratio of training courses spent on the topic).

### Design/Methodology

The research question was addressed using multilevel analysis (in MPlus) on the basis of data on job satisfaction and workload of 1.939 teachers as well as data on school climate and leadership orientations of principals from 198 German schools.

Results showed that teachers' job satisfaction contributed to proactive behaviours, whereas a high workload acted as a hindrance. Higher ratios of time spent in planning committees and higher cooperation frequency on school development were linked with a school climate characterised by high staff interest in professional training. This was, in turn, posi-

tively shaped by human resource-oriented principals.

#### Limitations and Research Implications

Teacher-level factors explained less variance compared to school-level factors. To further investigate the role of teacher-level variables, future studies should consider other factors (e.g., teachers' beliefs). Future studies need to also investigate if such behaviours are of lasting effect.

#### Originality/Value

A strong point of this study is that we assessed proactive behaviours of teachers rather than solely relying on their reports on their readiness to engage in school development. Secondly, to investigate leadership as a school-level factor we combined principal and teacher ratings.

### **Yes' we scored! How team processes and innovation affect performance in sports**

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#### Purpose

We studied the relationship between team processes (Marks, Mathieu, & Zaccaro, 2001), innovation and performance, focusing on the mediating role of team innovation and the moderators of the team innovation-performance relationship.

#### Design/Methodology

32 professional roller hockey teams in Portugal (32 coaches, 274 players) participated in a cross-sectional study involving multiple-source data and objective performance measures.

#### Results

Regression analyses supported our hypotheses: 1) team innovation mediated the relation-

ship between team processes and team performance; 2) the relationship between team innovation and team reputation was moderated by team negative emotional state and 3) the relationship between team innovation and goal scoring effectiveness was moderated by clarity of and commitment to objectives.

#### Limitations

We studied one domain of performance, which limits the generalizability of results.

#### Research/Practical Implications

Understanding how team processes contribute to performance and what factors enhance the effects of team innovation on performance is crucial for the development of theory as well for managing teams effectively.

#### Originality/Value

This is one of the first studies to identify moderators of the relationship between team innovation and performance. We also present a new indicator of team processes measuring the balance between the quality of task and relationship processes.

### **Researchers' social networks and performance: The impact of social network characteristics on the individuals' performance**

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#### Purpose

There are few studies in the literature involving the theme of researchers' social networks and performance. Therefore, this research aimed to identify social networks features of researchers in Psychology in Brazil and verify if these characteristics are able to predict the performance of these researchers, according to indicators of production.

**Design/Methodology**

The participants answered an online questionnaire that assessed their relationships with other researchers and their performance were evaluated using indicators such as number of articles, books and students' orientations. Network measures (centrality, size, geodesic distance and structural holes) were calculated. Inferential analysis and multiple regressions were performed with SPSS software, with productivity indicators as the criterion variable. The study included 997 Brazilian researchers.

**Results**

The results showed that centrality, network size and efficiency of the actor's contacts were predictors of international articles ( $R^2 = 0.28$ ,  $p = 0.045$ ) and books ( $R^2 = 0.39$ ,  $p = 0.024$ ). Network size, efficiency of contacts, network's boundaries, centrality and brokerage are related to thesis and dissertations oriented ( $R^2$  of 0.29 and  $p = 0.03$ ).

**Limitations**

The study is limited to Psychology social networks and Brazilian researchers.

**Research/Practical Implications**

The results corroborate the theoretical assumptions linking social networks to productivity.

**Originality/Value**

This paper works with the structural holes as predictors of individual's performance.

### **Team and teamwork Evaluation of interprofessional teamwork in rehabilitation clinics – A quantitative and qualitative approach**

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**Purpose**

In rehabilitation clinics interprofessional teamwork is an important precondition for treating patients successfully. The aim of this study was to evaluate both the current situation of interprofessional teamwork and the importance of team development.

**Design/Methodology**

We collected interview (18 semi-structured single and 5 group interviews with different health care professionals) and questionnaire data ( $N=65$ ) in 6 rehabilitation clinics. The interview data were analyzed using a content analysis by Mayring. In the questionnaire interprofessional teamwork and key elements of teamwork such as work climate, communication, coordination and patient participation were rated from 1 (excellent) to 6 (insufficient).

**Results**

The evaluation of teamwork significantly differed between rehabilitation clinics in the view of health care professionals (interprofessional teamwork, work climate, patient participation and communication, all  $p < .05$ ). Both executive (75%) and staff (44%) declared patient-centered team development as very important. The analysis of the qualitative data shows that organizational conditions of interprofessional teamwork were partially lacking and health care professionals desired a better communication, cooperation and acceptance by their colleagues and executives.

**Limitations**

Limitations of representativeness may be caused by the fact that we dealt with a regional sample in the south-western area of Germany and with small sample size.

**Research/Practical Implications**

These results demonstrate that interprofessional teamwork should be improved in rehabilitation clinics. To optimize integrated patient-centered care it is necessary to support

interventions which focus on teamwork such as team development, team training or team coaching.

#### Originality/Value

Using a mixed-method approach the study gives a broad empirical view of teamwork.

### **Should we draw on groups to control a nuclear power plant? Effects of group interaction on group learning and performance at dynamic system control tasks.**

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#### Purpose

Proper management of dynamic systems (e.g. cooling systems of nuclear power plants or production and warehousing) is important to ensure public safety and economic success. So far, research has provided broad evidence for systematic shortcomings in individuals' control performance of dynamic systems. We aim to investigate whether groups manifest synergy (Larson, 2010) and outperform individuals and if so, what processes lead to these performance advantages.

#### Design/Methodology

In three experiments - including simulations of a nuclear power plant and a business setting - we compared the control performance of three-person-groups to the average individual performance and to nominal groups (N = 75 groups per experiment). The nominal group condition captured the statistical advantage of aggregated group judgments not due to social interaction.

#### Results

Results show a superior performance of groups compared to individuals. Second, a meta-analysis across all three experiments provides the first evidence for interaction-based process gains in dynamic control tasks:

Interacting groups outperform the average individual performance as well as the nominal group performance. Third, group interaction leads to stable individual improvements of group members that exceed practice effects.

#### Limitations

It remains to be seen how these effects apply to other dynamic settings and practitioners in dynamic work environments.

#### Research/Practical Implications

These results imply that employers should rely on groups to provide opportunities for individual learning and to foster dynamic system control at its best.

#### Originality/Value

We provide the first unequivocal evidence for interaction-based performance gains of groups in dynamic control tasks.

### **Social loafing and team performance: The compensating effect of agreeableness and conscientiousness**

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#### Purpose

Although it is often assumed that social loafing is detrimental for team performance, I propose that this relation is not always negative. Drawing from theories on social loafing, social compensation, and trait activation, I propose that both the level of agreeableness and conscientiousness in teams could compensate for social loafing.

#### Design/Methodology

We tested our hypotheses in a study among newly formed student teams (N = 209 teams, n = 644 persons), using surveys. Team performance comprised the grade the teams obtained for the assignment.



### Results

A significant three-way interaction indicated that especially conscientiousness can compensate for social loafing in teams, given that agreeableness is also high. Under conditions of low social loafing, conscientiousness becomes less important, while agreeableness stays important for performance.

### Limitations

A limitation is that while I do indeed have evidence about the core process involved – social loafing– the content of this process is not crystal clear.

### Research/Practical Implications

Given the extensive use of team projects in business schools, it is advised to use either as more systematic approach to compose teams, using a variety of criteria (i.e. CATME), and/or the use of a team charter. Future research could determine the extent to which social loafing indeed diminishes significantly as a result.

### Originality/Value

The current study puts individual difference-factors center-stage in the study of social loafing and social compensation, and does so in a real-life setting, rather than a laboratory context, investigating personality traits before the teams are formed and measuring team processes after team formation.

## **Motivated by “a little help from my friends”: Social support as trigger of motivation gains in teams**

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### Purpose

Social support from fellow team members is often considered as important motivating

factor in teamwork. Support has, however, been primarily studied as buffer against stress. This study demonstrates social support from fellow team members as a source of process gains in teams by increasing motivation and performance beyond the level of individual work.

### Design/Methodology

Effects of social support on performance were tested in two experimental studies, employing written scenarios and self-reports of motivation among athletes (Study 1, N = 94) and a persistence task with objective performance measures and video analyses of behavior among students (Study 2, N = 89).

### Results

Both studies consistently showed that receiving social support from fellow team members triggered significant motivation gains compared to either individual work or teamwork without social support. Study 2 further showed that each act of social support (e.g., cheering, encouragement, clapping) increased motivation and performance.

### Limitations

Further research should replicate and further explore the effects of social support in less controlled conditions ensuring that the observed effects also operate in real-world settings, particularly in organizational teams.

### Research/Practical Implications

Understanding the dynamics of social support from team members offers valuable insights for managers how individual motivation and performance in teams might be increased, and how team members can contribute to the motivation and performance of their colleagues.

### Originality/Value

This is the first study documenting effects of social support on performance in teams using clear baseline conditions that enable accurate

and reliable assessments of process gains in comparison to individual work and teamwork without social support.

### **Team communication and team performance: The moderating effect of task requirements and workload**

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#### **Purpose**

The purpose of the present study is to examine the relationship between communication and (perceived) team performance in military helicopter cockpit teams under various working conditions: high/low workload and integrated/separate tasks. Based on theory and interviews we hypothesized that openness of communication was more helpful in integrated, cooperative task conditions than in clearly defined, separate tasks. In addition, we expected that workload would amplify this effect.

#### **Design/Methodology**

Respondents were military Westland Lynx crews, flying in a Full Mission Flight Simulator, monitored by an instructor.

100 simulated flights by two-member teams were examined: 64 cooperative, 36 separate situation. After each sortie, crew members rated quality of team communication, workload, their own individual performance, team performance and team potency. Team performance rating was provided by the instructor.

#### **Results**

Most expectations were confirmed. There was a significant relationship between communication and individual performance and be-

tween communication and team performance instructor rating. The interaction between situation and communication was found for team potency but not for individual and team performance.

The expected threefold interaction between communication, situation and workload. was significant in the prediction of team potency and individual performance, but not of team performance.

#### **Limitations**

Though the simulator in use is considered to be very realistic, replication in real-life situations is wanted.

#### **Research/Practical Implications**

The results attribute to the discussion about training high levels of open communication in all circumstances versus a "silent cockpit" in some situations.

#### **Originality/Value**

This research has high practical value due to the unique setting in which the data were collected.

### **On chemistry in work groups. Social sensitivity, cross-understanding of habitual routines and group performance**

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#### **Purpose**

Research on habitual routines has found that almost 50% (Wood, Quinn, & Kashy, 2002) to 95% (Bargh & Chartrand, 1999) of behaviors in daily life are performed in a non-deliberative, relatively thoughtless manner. Team members must be able to anticipate on the habitual routines of their fellow team members to make coordination more feasible (Gersick & Hackman, 1990). To address the extent to which group members anticipate on personal habitual routines of other group members, we

here introduce and test the concept of cross-understanding of habitual routines (CUHR). We propose that CUHR mediates the relation between social sensitivity and group performance and that group size and tenure moderate this association.

#### Design/Methodology

We sampled 335 group members and 71 group leaders from 87 work groups from the Netherlands, Romania, and Bulgaria to test our hypotheses. Leaders rated group performance. We used a matrix question with a name generator to ask group members to indicate the level of understanding each fellow group member has about his/her work habits.

#### Results

The results of moderated mediation-analyses show that CUHR mediates the relationship between social sensitivity and group performance in small groups with low tenure.

#### Limitations

The cross-sectional design limits claims of causality.

#### Research/Practical Implications

The results imply that understanding habitual routines can only develop in small teams and is only effective for groups with low tenure.

#### Originality/Value

To our knowledge, this study is the first to study the association between cross-understanding of habitual behavior and group performance instead of focusing on (cross-)understanding of knowledge or mental models.

### **Fit of attitudes toward male anti-femininity norm in dyads of colleagues: Effects on men's strain and well-being in female-dominated occupations**

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#### Purpose

Prior research showed that men's strain and well-being was influenced by their attitudes toward the male gender role. More traditional men face negative consequences. Especially for men in female-dominated occupations, traditional attitudes toward the male role might be dysfunctional, because the feminine image of their jobs seems to exclude masculinity norms like anti-femininity. Furthermore, men in these occupations usually collaborate with a majority of women. We explored the interplay of relationships between men's and women's gender role attitudes on men's strain/ well-being.

#### Design/Methodology

N = 139 men in nursing, kindergarten and primary school teaching were surveyed for attitudes towards male anti-femininity norm, irritation, depressiveness, job satisfaction, and performance-based self-esteem. Additionally, one female colleague per man indicated her attitudes.

#### Results

Polynomial regressions with response surface analyses showed additive relationships between men's and women's attitudes on men's strain/ well-being. Furthermore the degree of discrepancy was related to the outcomes. In general, less traditional attitudes towards male anti-femininity of men and women were beneficial for men, and traditional attitudes dysfunctional. When men had traditional attitudes towards anti-femininity norm, women's attitudes moderated the effect on men's strain/ well-being: Less traditional attitudes of

women could buffer negative effects of men's traditional attitudes on men's strain/ well-being.

#### Limitations

Causality remains unclear as strain/ well-being may also influence attitudes.

#### Research/practical implication

Meaningful for diversity issues the results suggest that fit of attitudes between colleagues does not necessarily go along with strain and well-being.

#### Originality/Value

We applied polynomial regressions with response surface analyses to a sample of paired colleagues and integrated two sources of data.

### **Collective mind versus collective identity: Complex problem solving in diverse teams**

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#### Purpose

Teams diverse in member composition often face the "diversity/consensus dilemma" (Argote & McGrath, 1993) when struggling to solve complex problems. Analyzing diverse teams from the Tightly/Loosely-Coupled-System (TLCS) approach - which specifies the quality of interactions among system elements and shows how these interactions could be modeled to lead to desired outcomes (Orton & Weick, 1990) - the prediction is made that to realize the diversity potential for solving complex problems, teams have to be simultaneously coupled tightly within the task- and loosely within the social domain. Additionally, a contra-hypothesis is derived from the Interactive Model of Identity Formation (Postmes, Haslam, & Swaab, 2005), which suggests a tight social coupling within diverse teams based on the induction of a collective identity out of interindividual differences.

#### Design/Methodology

An experiment was conducted in which the degree of social coupling between members of 62 diverse teams ( $n = 248$ ) was varied while the degree of task-related coupling was kept constant and tight across three conditions. Dependent variable was team problem solving performance.

#### Results

Logistic regressions and ANOVAs inconsistently supported hypotheses. Whereas both loosely and tightly coupled teams were equally effective in solving the problem, the tightly coupled teams were significantly more likely to quit the task.

#### Implications

Both kinds of social coupling (loose and tight) in diverse teams can give rise to overcoming the diversity/consensus dilemma when the coupling type accommodates the nature of the problem to be solved.

#### Originality

This is the first study to apply the TLCS approach to diverse teams and demonstrate its usefulness for overcoming the diversity/consensus dilemma.

### **Equal, yet different. The effects of colorblindness and multiculturalism on employees' sense of inclusion**

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#### Purpose

Organizations dealing with a diverse workforce commonly adopt one of two approaches: colorblindness or multiculturalism. Whereas the colorblind approach stresses that everyone should be treated the same regardless of group membership, the multicultural approach focuses on the acknowledgement and appreciation of group differences because of

the proposed beneficial influence of these group differences on work processes.

The goal of the present research was to investigate how these two approaches are related to each other and explain how they affect employees' sense of inclusion.

#### Design/Methodology

We applied structural equation modeling on survey data collected among employees working in a university of applied sciences ( $n = 595$ ).

#### Results

We found that both colorblindness and multiculturalism positively predicted employees' sense of inclusion within the organization. Interestingly, these effects were explained by two different processes. Whereas the effect of colorblindness on inclusion was partly mediated by the perception that men and women do not form separate subgroups, the path from multi---culturalism to inclusion was partly mediated by the degree to which employees could verify their social self-views. In addition, treating everybody the same, irrespective of gender (colorblindness) was positively related to acknowledging and valuing differences between men and women (multiculturalism).

#### Limitations

We used self-reported cross-sectional data for our analysis.

#### Research/Practical Implications

This research offers organizations and scholars a deeper insights into how and why diversity approaches affect employee inclusion.

#### Originality/Value

This research is innovative in that it proposes and demonstrates that colorblindness and multiculturalism are not mutually exclusive, but in fact may complement each other.

### **Intergenerational cooperation as a driver of team commitment and retention**

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#### Purpose

To investigate the impact of team composition in terms of generational diversity (surface level, i.e. age, and deep level diversity, i.e. differences in psychological contract perceptions and evaluations), perceived quality of intergenerational cooperation, and team leader coaching on team members' commitment to the team and intentions to stay.

#### Design/Methodology

A study was conducted consisting of 21 focus groups and a survey within 78 teams ( $n = 659$  employees and 78 team leaders) from three federal government institutions in Belgium. The survey sample consisted of teams varying in degree of intergenerational diversity.

#### Results

Despite the existence of differences between generations in terms of their psychological contract, perceived quality of intergenerational cooperation was a major driver of team commitment and retention. Teamleader coaching was positively associated with perceived quality of intergenerational cooperation.

#### Limitations

The results are based on self-report data obtained from employees and supervisors. Future research should also include objective indicators of team performance.

#### Research/Practical Implications

Implications: our findings contribute to the literature on diversity, aging and teams. In addition to presenting our findings we also comment on the processes we worked out together with the organization to facilitate intergenerational cooperation and the implications for team leader coaching.

**Originality/Value**

Managing generations is an important challenge in contemporary HRM. Given the ageing of the workforce, and the increasing importance of teams in organizations, studying intergenerational cooperation within teams is a timely topic.

**When sheltered workers enter regular organizations: managing diversity among workers in lower educated jobs**

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**Purpose**

Harrison & Klein (2007) describe three diversity types: variety, separation and disparity. This study tests the proposition that in work teams consisting of regular employees and employees formerly working in sheltered work places (SW's), these diversity types pose a challenge, and a promise for sustainable integration and employability of SW's.

**Design/Methodology**

In a study among 14 organizations, in 36 work teams, employers (N=14), team managers (N=36), SW's (N = 36) and their coworkers (N= 36) were questioned about concepts such as leadership, feedback, team composition, that may relate to effective team integration and performance. Common method bias was prevented, and we were able to compare multiple perspectives.

**Results**

Work teams in lower educated jobs shine a new light on the concepts of variety, separation and disparity. In addition, this study confirms that different diversity types need different diversity management strategies.

**Limitations**

The necessary adaptation of validated scales to lower educated employees (more practical, shorter, oral questionnaires) challenges the

comparability with previous studies. Moreover, all results are correlational.

**Research/Practical Implications**

This study in work teams with lower-educated jobs provide new insights to diversity literature, often conducted among highly educated professionals. Moreover, in the field of lower educated jobs, it provides a new perspective on sustainable integration and employability.

**Originality/Value**

To the best of our knowledge, the application of diversity types to teams consisting of SW's and regular employees in lower -educated jobs is new. This is important for diversity research, and important for countries facing the challenge of including sheltered workers in regular organizations.

**Problem-based learning for medical students: What can we learn about collaboration and its link to problem-solving skills?**

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**Purpose**

Problem-based learning (PBL) has a long history in medical education. Theory and empirical research suggest that by having medical students learn through the experience of actively solving problems, they can acquire medical knowledge as well as collaboration skills for more efficient teamwork. In comparison to traditional medical education, students after PBL score lower on multiple-choice measurements but higher on problem-solving and clinical performance tasks. But there is little research examining how collaboration skills are developed by PBL. According to Boos et al.'s



(2011) integrative model of group coordination, we hypothesise that the impact of PBL on knowledge and collaboration skill acquisition is mediated by coordination process patterns in the learning group. As the use of such coordination mechanisms in a group interaction process reduces task complexity, we expect that groups incorporating coordination process patterns in their PBL will achieve better results.

#### Design/Methodology

We videotaped seven PBL-groups (medical students), each of them working on three different medical cases during seven meetings over three weeks. Each verbalisation was classified into one of 44 categories of coordination behaviour. Each proposal for solution was rated for correctness by experts to obtain performance measurement.

#### Results

Sequential and pattern analysis conducted with "Interact 9" supported our hypothesis.

#### Limitations

It remains to be tested how initial individual motivation and the level of medical knowledge affect coordination and collaboration patterns.

#### Research/Practical Implications

The results can be valuable to improve medical curricula by including PBL-courses.

#### Originality/Value

This study is the first to longitudinally analyse micro-level collaboration patterns of PBL-groups interactions and their link to performance quality.

### Handling uncertainty in group decision making: Field observation of a multidisciplinary tumour board

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#### Purpose

Complex decision making in groups usually involves dealing with uncertainty. Based on the work of Lipshitz & Strauss (1997) we investigated what kind of decision strategies groups in the field use to cope with uncertainty. As research setting tumour boards of an university hospital were selected, assembling physicians with specialized knowledge for the diagnosis and treatment of tumours.

#### Design/Methodology

A structured nonparticipant observational study was employed to address the research goal. A total of 20 videotaped case discussions from ten tumour boards were analyzed (N=20). It was assessed what kind of strategies were used during the case consultation and also at what particular time the strategies were used by board members. In addition, the majority of board members participated in a questionnaire survey (N=15), which asked for their subjective view on handling uncertainty.

#### Results

The results show that the most often used strategies to cope with uncertainty focuses on the reduction of uncertainty (e.g., by gathering additional information). Only if these approaches fail, other strategies become predominant (e.g. acknowledging, suppressing).

#### Limitations

The current findings rest on the observation of one tumour board in one hospital. Future field work is necessary to validate the findings in other hospitals in order to rule out potential sample biases.

### Research/Practical Implications

To develop effective tumour boards, it is necessary to understand how experts handle successfully uncertainty.

### Originality/Value

However, the study is the first to systematically analyze handling uncertainties in tumour boards, and it exemplifies the importance of implementing appropriate mechanisms to ensure that care delivery is consistent with the best available evidence.

### **Conflicting in a safety context: The role of psychological safety on team conflicts and satisfaction**

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### Purpose

Team conflict has been identified as a key process to team effectiveness. However, research on the predictors of intragroup conflict has been mainly focused on team composition variables and less in the context variables such as team climate. This study examined the extent to which psychological safety and team learning orientation influence team conflict (task conflict, relationship conflict, and temporal conflict), and in turn, team satisfaction.

### Methodology

A total of 218 teams (419 individuals) participated in this study. All teams were enrolled in a management simulation for a 5-week period. Participants answered three different questionnaires during this period.

### Results

Results from the three multiple-steps multiple mediator models showed that team learning orientation and the three types of intragroup conflict fully mediate the relationship between psychological safety and team satisfaction.

### Limitations

Although data were collected in different time point, causal ordering should be tested in future studies.

### Implications

These results draw attention to the importance of team climate on team processes and dynamics among members. A positive team climate maybe the key to gaining the benefits of team conflict.

### Originality/Value

This study extends the literature of team conflict by exploring two different team climate predictors that have been ignored in literature: psychological safety and team learning orientation.

### **The evolution of team mental models similarity and accuracy over time: A latent growth modeling approach**

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### Purpose

This study aimed to investigate the evolution of team mental models (TMM) similarity and accuracy over time, for the following three TMM dimensions: task, team and temporal.

### Design/Methodology

The participants of this study consisted of 240 teams (1099 individuals) enrolled in a management competition. We collected data at three different moments of time through questionnaires. We conducted Latent Growth Modeling and Latent Class Analysis in Mplus.

### Results

In general, TMM similarity increased significantly over time for the three dimensions. Regarding TMM accuracy, the temporal dimension increased over time, the team di-

mension decreased, and task dimension revealed no significant change.

#### Limitations

Despite the fact that we measured TMM in three points in time, could be more interesting and more explanatory if we increased the number of time measurements.

#### Research/Practical Implications

Our study allowed to understand what happens with TMM, how they develop, change, increase, and decrease. On practical point of view, our findings demonstrated that teams should receive training in order to develop a shared understanding about relevant task aspects before task performance episodes since during the task performance is more difficult to change and to improve their shared understanding.

#### Originality/Value

More than study what TMM are, and analyze the impact of TMM on team processes and effectiveness, it is important understand what happens with TMM. Our study opened a new avenue in this topic, since showed how TMM similarity and accuracy change over time and the existence of different patterns according to TMM specific content.

### **Do I have what it takes? Instrumentality and expressiveness as predictors of speaking up in high-risk teams**

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#### Purpose

Speaking up, that is, voicing concerns and challenging the status quo (Edmondson, 1999) is particularly crucial in high-risk contexts where incorrect team decisions might have fatal consequences. However, little is known

about how individual differences might impact the ability to speak up. We used the fundamental self-concept dimensions instrumentality (i.e., assertiveness, self-confidence, persistence) and expressiveness (i.e., kindness, helpfulness, friendliness) to investigate individual differences in speaking up in anesthesia teams (e.g., Abele, 2003; Bakan, 1966). We hypothesized that team members who perceive themselves as highly instrumental are more likely to speak up during simulated adverse events than team members who perceive themselves as rather expressive.

#### Design/Methodology

Sixty-one anesthesiologists (33 doctors, 28 nurses) organized in two-person teams participated in the study. We simulated adverse events using a patient simulator. Prior to the simulation we assessed instrumentality and expressiveness via a self-report measure and coded subsequent speaking up behavior retrospectively using videotapes of the simulated adverse events.

#### Results

In line with our hypothesis, we found that instrumentality positively predicted speaking up behavior while expressiveness negatively predicted speaking up.

#### Limitations

Future research needs to test to what extent these findings can be generalized to other team and organizational contexts.

#### Research/Practical Implications

The results point to the beneficial role of instrumental attributes for speaking up and might be incorporated into team trainings and interventions (e.g. via activation of the instrumental self).

#### Originality/Value

This is the first study that has investigated the differential effects of the fundamental self-

concept dimensions on required speaking up behavior within a high-risk context.

### **“Don’t let the group down”: Facets of instrumentality moderate the motivating effects of groups in a field experiment**

#### ***Nominee of the EAWOP Congress 2013 Best Paper Award***

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#### **Purpose**

Today most companies employ certain forms of working groups. Positive effects on motivation have often been demonstrated in laboratory settings whereas studies examining existing groups are relatively scarce. To extend the knowledge, this study examined a sample of professional relay swimmers. Based on the Collective Effort Model (Karau and Williams, 2001) we predicted motivation gains in relay competitions only to occur if individual performance was highly instrumental for the group’s performance (i.e., later serial position in the relay) and the group’s performance was highly instrumental for the group’s outcome (i.e., good chances of winning a medal).

#### **Design/Methodology**

We collected performance data of swimmers who entered both the individual and the relay 100m freestyle competition during a major swimming event from 1996 to 2011. We analyzed the difference scores between a swimmer’s individual and relay performance.

#### **Results**

Motivation gains attributable to the group occurred only for swimmers starting on a later serial position of a relay with high winning chances.

#### **Limitations**

Applicability of results to an organizational context might be restricted as structures in working groups are more complex than in a relay and instrumentality might not be salient all the time.

#### **Research/Practical Implications**

The results show how to elicit motivating group effects: Establish a high contingency between individual performance and group performance and a high contingency between group performance and positive group outcome.

#### **Originality/Value**

This study was able to show group motivation gains in existing groups that were already performing on an extremely high level (e.g., in Olympic finals).

### **A close look over conflict management in trained and untrained virtual teams**

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#### **Purpose**

The aim of this paper is to examine the effects of team-self guided training contained feedback regarding task-related aspects and relationship-related aspects on the frequency of use of conflict management strategies as well as to analyze specific tendency of frequency of use of conflict management strategies developed by trained and untrained synchronous CMC teams.

#### **Design/Methodology**

A laboratory experiment was carried out with 54 virtual teams of 4 members each randomly assigned to the two experimental conditions: experimental condition and control condition. In the experimental condition 28 teams received a training program for improving virtual team conflict management.

### Results

Our results showed that trained synchronous CMC teams use more frequently functional conflict management strategies and less dysfunctional conflict management than untrained synchronous CMC teams. Moreover, our results pointed out that trained virtual teams tend to use more frequently functional conflict management strategies, and less frequently dysfunctional conflict management strategy over time. In contrast, untrained virtual teams tend to use more frequently dysfunctional conflict management strategy, and less frequently functional conflict management over time.

### Limitations

The present study was carried out in a laboratory setting using student teams as a sample and content analysis as a methodology of study.

### Research/Practical Implications

The present study clarifies what kind of conflict management strategies tend to use to face their conflicts synchronous CMC teams as a group. Our findings highlights the importance of team members take their own decisions to tackle their problems.

### Originality/Value

Our study might shed light on the benefits of team self-guided training on team conflict management in virtual contexts.

## Exploring the nomological network and development of virtual team social identity

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### Purpose

Social identity plays a crucial role in determining how team members interact and perform (Tyler & Blader, 2000; Van Knippenberg, 2000). Though virtual work teams are becoming an increasingly prominent way in which teams work together, past research has yet to examine the development of social identity in virtual teams over time. In the current research, we seek to explore the dynamic development and correlates of virtual team social identity.

### Design/Methodology

Twenty one 3-member virtual teams participated in an online multiplayer video game tournament over the course of ten-days. Team members filled out daily questionnaires providing information on task-related and team-related characteristics. Objective game data were obtained from the video game's developers.

### Results

We examined each team's dynamic pattern of identity development (charts will be provided and described in poster). Simple bivariate correlations were calculated to investigate relationships among social identity and its potential correlates. There were significant relationships with team familiarity, communication, task cohesion, task satisfaction, and team viability. No significant relationships were discovered between team social identity and objective team performance, members' cognitive ability or personality facets.

### Limitations

The generalizability of our findings would need to be established with other types of team tasks (e.g., in a asynchronous virtual team context).

### Research/Practical Implications

Virtual teams should foster a high shared sense of identity if they want to aim for team cooperation and satisfaction.

**Originality/Value**

Past research has investigated teams at one point in time, but teams normally exist for longer than one time-point. Our study provides a dynamic-longitudinal look (i.e., 10-timepoints) at virtual team identity development patterns.

**Creativity in virtual teams – The role of familiarity, personality, and motivation**

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**Purpose**

Today's fast changing markets and globalization place creativity and innovation as well as computer supported cooperative work at the top of global companies' agendas. This study addresses the question of whether it is possible to combine these two facets of today's professional world. Building on the Component Model of Creativity by Amabile et al. as well as Media Synchronicity Theory (Dennis & Valacich), it is hypothesized that familiarity with team members, as well as intrinsic motivation and certain personality characteristics are conducive to creativity in virtual collaboration.

**Design/Methodology**

To test these hypotheses, an experiment with 120 master students was conducted. The subjects, randomly assigned to a virtual or face-to-face condition, performed two verbally creative tasks. Three experts from creative professions rated the results.

**Results**

Regression analyses support the importance of familiarity for creative virtual work, as well as a mediating effect of intrinsic motivation for the influence of perceived freedom and perceived performance on the creative result. Furthermore, openness to new experiences significantly influences the creative outcome

in the virtual condition, whereas extraversion has a significant influence in the face-to-face condition.

**Limitations**

Generalizability of the results from this study is doubtful due to the abstract nature of the experiment.

**Research/Practical Implications**

Suggestions are made for validation of the results in field studies. Practical implications pertain to the compilation of virtual teams.

**Originality/Value**

In this study, a systematic analysis of the influencing factors on creativity in virtual teams is conducted using a controlled laboratory experiment with complex tasks.

**Virtual team performance: The role of conflict and humor in a 3D virtual environment**

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**Purpose**

Prior research has shown that conflict is negatively associated with team performance while humor has positive implications for team effectiveness. In the current research we propose that humor will moderate the relationship between conflict and team performance.

**Design/Methodology**

We tested our hypotheses among student teams (N = 48 teams, n = 198 persons), working together in a virtual 3D-environment, using surveys. Team performance comprised the mean grade the teams obtained for the assignments.



### Results

Task conflict was positively related to team performance, while relationship conflict was negatively related. A significant three-way interaction indicated that team performance was highest when task conflict and humor were both high, and relationship conflict was low. Humor seemed to add to the positive effect of task conflict, while the effect of relationship conflict seemed to worsen under conditions of high humor.

### Limitations

A limitation is that while we do indeed have evidence about the core process involved – humor – the content of this process could be clarified by video-codings of team interactions.

### Research/Practical Implications

The findings of this study indicate that both conflict and humor play important roles in virtual team performance. Future research could focus on how the extent of humor and kind of humor can lead to differences in team performance in 3D contexts.

### Originality/Value

The current study puts humor center-stage in the study of conflict and team performance. Besides, by studying these relationships outside the traditional context (a 3D virtual world setting), we find that the relationship between relationship conflict and performance is in fact moderated by the level of humor.

## **Virtual meetings of the future - A socio-technical perspective for the improved management of meetings**

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### Purpose

Recent technological solutions have revolutionised the way in which organisations communicate in today's working world. Meetings

have evolved from those attended in-person by all, to virtual ones characterised by the use of a variety of electronic media allowing employees to link in from any location in the world. This work will introduce an approach to an investigation of meetings from a socio-technical perspective. It will highlight key issues related to virtual participation and suggest practical ways of overcoming these.

### Design/Methodology

This study was conducted in a large multinational organisation within the UK and data collection and analysis are supported by the Socio-Technical Theory principles throughout. A mixed method approach has been used including questionnaires and interviews.

### Results

The findings of this research are in the form of practical considerations and recommendations for more effective management of virtual meetings.

### Limitations

The applicability of some of the findings may be limited to the sector in which the study was conducted.

### Research/Practical Implications

This work will help the organisation improve the management of their virtual meetings through better understanding of the social and technical aspects of the system. The ease with which such technology can be used aids organisational expansion allowing for its representatives to be placed globally.

### Originality/Value

This work will highlight the importance of socio-technical approach in the analysis of organisational systems and suggest applicability of this perspective to different communication mediums. Due to changes in working patterns and technology, much more emphasis is now placed on virtual meetings

## Posters

### How is the impact of buffering team boundaries on innovative team performance best explained? A test of an instrumental versus an expressive mechanism

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#### Purpose

Prior team research has almost exclusively conceptualized team boundary management from a perspective of information processing. This paper approaches the issue of team boundary buffering, an external process by which teams protect themselves against uncertainty and disturbances from the outside, from a conservation of resources perspective. We test whether the effect of team boundary buffering on innovative team performance is better explained by an instrumental path of gained team information processing or by an expressive path of gained team energy, that we define as the extent to which a team mobilizes the collective resources of its members.

#### Design/Methodology

In a field setting in a cross-sectional sample of 89 functional RD-teams from the automotive industry, comprising 724 employees and 89 team leaders, we tested a dual mediator model with OLS regression.

#### Results

Our dual mediator analysis supported the occurrence of an expressive path via team energy and only partly confirmed the existence of an instrumental path via team information processing.

#### Limitations

The cross-sectional data does not allow to draw any causal inferences. The generalizabil-

ity of our conclusions is limited by the specific type of teams (R&D).

#### Research/Practical Implications

Our results suggest that the impact of team boundary buffering on the innovative performance is better explained by the expressive motivational state of team energy than the instrumental team process of information elaboration. Besides the instrumental reach for their goals, R&D teams should thrive for an expressive, energetic team environment to gain innovative performance.

#### Originality/Value

This study challenges the assumption that team boundary management is primarily an instrumental issue of information processing.

### Bringing absorptive capacity to the team-level

#### *Nominated for the EAWOP Congress 2013 Best Poster Award*

Julia Backmann (LMU Munich, DE) [backmann@bwl.lmu.de](mailto:backmann@bwl.lmu.de), Martin Hoegl (LMU Munich, DE)

#### Purpose

Increasingly, organizations collaborate with suppliers, competitors or technology providers to access knowledge, resources and share costs when developing new products. Prior research acknowledges the importance of an organization's absorptive capacity for its innovation performance – the organization's ability to acquire new knowledge and information, assimilate, transform and exploit it. As all organizational innovations are usually developed by project teams, it is important to bring the organizational-level construct absorptive capacity to the team-level. Consequently, we developed a measure for team-level absorptive capacity and studied its relation to project performance.

**Design/Methodology**

We collected data from 70 inter-company innovation teams and included data from team members, team leaders and team managers in our analysis. The sample mainly focused on the engineering industry in German-speaking Europe.

**Results**

We performed a factor analysis to validate the developed absorptive capacity construct. We further tested our hypotheses using regression analysis (SPSS). We found that team-level absorptive capacity does impact on project performance.

**Limitations**

The cross-sectional design of the study does not allow full inferences about the causality of the relationships. Moreover, the generalizability of our findings might be restricted by region and industry.

**Research/Practical Implications**

As team-level absorptive capacity is linked to project performance, it is important to identify factors that are able to influence if team members engage in absorptive capacity activities.

**Originality/Value**

The research of team-level absorptive capacity is still in its infancy. This study provides step forward in developing a team-level construct of absorptive capacity and also underlines its importance for project performance.

### **One size fits all? Coordination in high-risk vs. innovation teams.**

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**Purpose**

The purpose of this conceptual paper is to compare coordination requirements and coordination mechanisms in high-risk (e.g., op-

erating room teams) vs. innovation teams (e.g., product development teams). We aim to enhance their mutual learning potential which has not yet been fully seized. Prominent similarities have not been acknowledged and may lead to significant performance increases in both types of teams by adopting established practices of team coordination.

**Design/Methodology**

We reviewed the literature on coordination in high-risk and innovation teams and systematically compared both types of teams with respect to team and task characteristics, coordination requirements, and coordination mechanisms.

**Results**

Our results revealed significant similarities as well as differences between the two types of teams. Similarities included high degrees of uncertainty, increasing focus on communication and feedback, fast changing environments, productivity measures (e.g., cost, schedule, quality, and safety as additional measure in high-risk teams). Differences existed with respect to team structure (ad hoc vs. long term), hierarchy, educational diversity, responsibilities (single vs. multiple), and the flexibility-stability-ratio.

**Limitations**

This is a conceptual paper; an empirical comparison between both types of teams has yet to be done.

**Research/Practical Implications**

We propose that coordination mechanisms such as explicit communication and reflexivity (e.g., debriefings/after-action reviews) could enhance performance in both kinds of teams. We propose further research empirically investigating potential performance increases that may be gained from growing exchange between high-risk and innovation teams.

**Originality/Value**

This is the first approach that systematically compares coordination in high-risk vs. innovation teams.

**Productivity in knowledge workers teams**

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**Purpose**

The use of Information Communication Technologies in work processes has not brought the expected productivity improvement. There even are researches showing that the always on model decreases it. To study productivity in organizations with a certain number of knowledge workers, this paper proposes three factors: contribution, competences and commitment and test the model with five case studies of productivity in companies.

**Design/Methodology**

The cases cover different profiles of knowledge workers, and in the five companies studied there were managers involved in productivity studies. The information recalled has been structured in six areas: organizational resources, group function analysis, competences, commitment, leadership style and productivity.

**Results**

The methodology applied in the five cases has confirmed the relevance of the three proposed dimensions in productivity: resources to help to worker contribution, a competence management model and strengthen commitment.

**Limitations**

To be able to really understand productivity for knowledge workers in networked groups, we need detailed information from each

worker activities and time assignment and management.

**Research/Practical Implications**

As practical implication an analysis model for productivity in knowledge workers teams have been proposed. It includes three realms: organizational resources, group management and operation, and integrated time planning for knowledge workers (the figure can not be added in this format).

**Originality/Value**

The value of this work is to analyse productivity with the available human resources framework in the organizations (managing by objectives schemes, competences model and commitment surveys).

**Beliefs and social representations of innovation: An empirical study with students and employees from three European countries**

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**Purpose**

Innovation is defined as the “act of introducing something new” (American dictionary), but economic and organizational literature underline different aspects of this complex process. OECD and the yearly survey of European Union on innovation are also based on definition by experts. This study investigates if beliefs and representations of lay people about innovation is similar to experts’ definition; it also tests differences in beliefs of people of different gender, age, education and nationality.

**Methodology**

A survey was conducted on 237 French, Italian and Spanish university students, enrolled in Science and in Liberal Arts faculties; 125 employees were examined in France and Italy. The questionnaire included: a) open questions

to define innovation, b) attitude to and c) beliefs about factors that promote or hinder innovation.

#### Results

Students share the concept that innovation is related to something 'new', 'creative' and 'technologic', an 'arduous process' which always brings something good to the adopting organization, through 'the contribution of many people with various skills'. Minor differences were observed among countries; limited effect of the type of faculty.

#### Limitations

Spain and Italy are countries with same level of innovativeness; limited number of students; exploratory study.

#### Implications

Although participants share some criteria used by experts, they have an ideal and selective representation of innovation, that ignores other aspects used by experts. This may explain difficulties in these countries to introduce innovations. Scientific knowledge and communication programs might help in spreading a more complete and clear representation of innovation.

#### Value

Students will be future workers that will have to introduce innovations in the job market.

### **Introducing text analytics to the study of medical team communication**

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#### Purpose

We analyzed the team communication in the field of a non-acute but potentially high-risk environment: the medical rehabilitation. We described the topics shared in interdisciplinary medical rehabilitation team meetings across

patient groups in order to support the team interaction in the future.

#### Design/Methodology

Transcripts from interdisciplinary team meetings audiotaped in a ward for rehabilitation of traumatic injured patients were analyzed. 58 patients were mentioned the time tagged text data that was processed by the IBM SPSS Text Analytics for Modeler text mining tool. The goal was to identify the main topics and the features of conversation, based on word frequencies and patterns.

#### Results

The most of team members and topics were included in the communication about the traumatic injured patients without complications. In contrast fewer members discussed the patients with complications and mentioned less the otherwise important topic of physiotherapy.

#### Limitations

The text data is planned to be extended with other situations of the team interaction.

#### Research/Practical Implications

The communication asymmetries reveal differences in knowledge sharing and pointing on the conclusion that the traumatic injured patients without complications are using the team cooperation the most. Where else the patients with complications cannot use the advantages of the team structure. Based on these findings a support could be developed to facilitate team communication and communication in a ward for different patients groups.

#### Originality/Value

Usage of text analytics was introduced as applied data mining to into team cooperation research. By this it became possible to use unstructured text data as a basis of a quantitative analysis.

### How do different types of counterproductive attendee behavior influence meeting satisfaction and effectiveness?

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#### Purpose

Meetings are a common tool in organizations but often unpopular. Although it has been mentioned that counterproductive behaviors of meeting attendees (e.g., conducting personal business during meeting, cutting others off) can affect meeting success, few researches have systematically examined counterproductive behaviors in meetings and how it affect meeting satisfaction and effectiveness. Therefore, the goal of our study is to examine the frequency of occurrence of different types of counterproductive meeting behaviors and how they related to meeting outcomes (and to specific meeting design characteristics).

#### Design/Methodology

In an online-survey, 355 employees from different organizations rated how often they observed different kinds of counterproductive behavior in their last meeting and how many attendees engaged in them. Furthermore, respondents rated meeting effectiveness and satisfaction as well as a number of items concerning meeting design and structure.

#### Results

An exploratory factor analysis indicated five categories of counterproductive meeting behaviors: absenteeism, unrelated activities, nonparticipation, dominant communication behavior, and inappropriate verbal statements. A multiple regression analyses indicated that nonparticipation and inappropriate verbal statements are particularly detrimental counterproductive meeting behaviors, reducing both meeting satisfaction and effectiveness.

#### Limitations

Counterproductive meeting behaviors and meeting outcomes was rated by the same person.

#### Research/Practical Implications

Meeting leaders should consider the negative effects of counterproductive behavior of attendees and should try to reduce its occurrence.

#### Originality/Value

This study provides a step towards allowing researchers and practitioners to identify the types of counterproductive meeting behaviors that are more or less prevalent in meetings and how these types of behaviors affect meeting success.

### The competencies of a dream team: A dynamic perspective

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#### Purpose

More than technical expertise, teams need to possess certain generic or transversal competencies in order to achieve work effectiveness. This paper aims to validate the most recent model in the literature based on the KSA approach - The ABC Model of Salas and colleagues (2009), by hypothesizing team competencies with three components - Attitudes, Behaviors and Cognitions.

#### Design/Methodology

This study involved 1887 individuals from 630 teams in a management challenge. We measured 25 team competencies through an online questionnaire.

#### Results

Through a second-order confirmatory factor analysis we concluded that the ABC Model did



not represent a good fit and, based on the results and on alternative analysis, that team competencies are better structured within a logical of activity phases (such as Transition, Action and Interpersonal). Thus, a team needs to have competencies for regulate, act and maintain the team and their work.

#### Limitations

The instrument used was a result from several author's work, without testing its global validity. For further research we propose to develop a team competencies questionnaire.

#### Research/Practical Implications

This work presents great contributions by empirically evaluated a conceptual model; by reconsidered the typical team competencies approach based on KSA through a dynamic and temporal perspective; and by increasing the knowledge of how to select, train and manage teams for their effectiveness.

#### Originality/Value

By reconsidering the KSA approach to an activity phase-related team competencies perspective we are looking to the nature of team competencies in a more dynamic, adaptive and temporal way.

### **Psychometric properties of a scale for measuring teamwork in interprofessional health care practice**

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#### Purpose

Effective patient-centred health care needs different health care professionals and their participation in treatment planning and process. However, there does not exist an instrument to measure the quality of teamwork in interprofessional health care teams. Therefore we designed a six item team-scale and evaluated the psychometric properties of this scale.

#### Design/Methodology

A cross-sectional study was conducted to evaluate the psychometric properties of the team scale by patients and staff in an interprofessional setting in Germany. 661 staff members and 1419 patients from 15 rehabilitation clinics were recruited for the study. Both versions of the team scale were tested concerning item characteristics, acceptance, reliability (internal consistency) and validity. Additionally, confirmatory factor analysis (CFA) was conducted to determine whether the instrument measures an unidimensional construct as intended. If the empirical data reproduces the proposed model was tested using a structural equation modeling (SEM).

#### Results

A total of 662 patients (46.6%) and 275 (41.6%) staff members participated in the study. The psychometric criteria were all acceptable to very good.

#### Limitations

The scale was only conducted in rehabilitation clinics; it should be tested in other interprofessional health care settings.

#### Research/Practical Implications

The instrument is parsimonious, but covers the most important aspects of teamwork in interprofessional settings. It could be recommended to assess the teamwork in interprofessional health care settings from patients and staff perspective.

#### Originality/Value

To the best of our knowledge there is not any scale which measures teamwork from both perspectives – patients and staff and in such a parsimonious way.

### **Does your team work at its best? Validation of the teamwork questionnaire**

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#### **Purpose**

Recent trends in organizational practice such as the increasing use of project teams suggest that teamwork is a common way to manage work in organizations. However, there is a lack of psychometrically valid measures for team diagnosis and subsequent team development. The Teamwork Questionnaire (TWQ; Fragebogen zur Arbeit im Team; Kauffeld, 2001, 2004) fills this gap. Building on the SGRPI-Model by Beckhardt (1972) and the Team Reflexivity Model by West (1994), we developed the theoretical underpinning of the TWQ: the team pyramid model (Kauffeld, 2001). At the basis of the pyramid, two factors describe the structural orientation of a team: goal orientation and task accomplishment. Building on this basis, two additional factors describe a team's personal orientation: cohesion and taking responsibility. In this study, we test the hierarchical structure of the pyramid model to show how the TWQ can be used for team development. Furthermore, we test a short version of the TWQ comprising 16 items.

#### **Design/Methodology**

We survey 513 individuals nested in 56 teams from two organizations.

#### **Results**

Multiple-step mediation showed evidence for the hierarchical structure of the pyramid model. Multilevel confirmatory factor analyses using MPlus supported the factor structure of the TWQ.

#### **Limitations**

The TWQ has only been validated for German speaking teams.

#### **Research/Practical Implications**

These results show that the TWQ is an economic and sound questionnaire which is of great practical value as it gives concrete suggestions for team development according to the pyramid model.

#### **Originality/Value**

This study is the first to test the theoretical model as well as a short version of the TWQ.

### **The impact of time perspective diversity on team performance and satisfaction: The mediation effect of time-oriented activities and relationship conflict**

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#### **Purpose**

Team members' time perspective (TP, i.e. orientation towards the past, present, and future) has been theorized and found to affect team performance (Mohammed & Nadkarni, 2011; Waller, Conte, Gibson, & Carpenter, 2001). In order to better understand how such influence is exercised, we distinguish between the cognitive and evaluative components of TP and examine the mediation effect of time-oriented activities and relationship conflict on the relationship between team TP diversity and team performance and satisfaction.

#### **Design/Methodology**

The data were gathered from 41 project teams of business graduate students over two months. Cognition- and evaluation-based TP was measured before the project started (t1). Time-oriented activities, relationship conflict, team performance, and team satisfaction were measured at the end of the project (t2). Task familiarity, team familiarity, and team demographic diversity (e.g. gender, age, nationality) were measured at t1 and added as control variables.

### Results

Future-probing activities and relationship conflict were found to mediate the relationship between team TP diversity and team outcomes.

### Limitations

The generalizability of the results is limited to project teams. Time-oriented activities were measured by perceptions rather than actual behaviors during the project.

### Research/Practical Implications

The study reveals a double-sword effect of team TP diversity on team outcomes, that is, (1) the benefit of diversity in cognition-based TP on team performance through future-probing activities and (2) harm of diversity in evaluation-based TP on team satisfaction through relationship conflict.

### Originality/Value

The study highlights the importance to distinguish between cognition- and evaluation-based TP and proposes two parallel models to investigate its influence on team outcomes and pertinent mediation mechanisms.

## **The influence of organizational diversity ideologies on intergroup relations at work**

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### Purpose

Research on social diversity shows that the individual endorsement of multiculturalism is more efficient in order to reduce prejudice towards outgroups than assimilationism. Nevertheless, multiculturalism has better effects for members of minorities than majorities, while the reverse is true for assimilationism. However, studies on these diversity ideologies in work settings remain scarce. The

purpose of this research is to analyze if the impact of these ideologies on relationships between minority (i.e., foreign) and majority (i.e., Belgian) workers is moderated by their intergroup status (i.e., being a member of the minority vs. the majority) when ideologies are endorsed at the organizational level. Furthermore, the feeling of inclusion (i.e., the feeling that one's group both belongs to and distinguishes itself within the organization) is studied as a variable mediating these relationships.

### Design/Methodology

116 workers living in Belgium (35 from minority and 81 from majority) were surveyed via Internet.

### Results

The data analysis is still in progress, but preliminary analyses show that multiculturalism has better effects than assimilationism for both groups.

### Limitations

One limitation is that participation to our study was voluntary so that participants may thus be initially less prejudiced. Thus, the results of this study should be replicated using another procedure.

### Research/Practical Implications

This study will shed light on the impact of organizational diversity ideologies and the mechanisms involved. Moreover, it will also provide organizations with levers needed to harmonize intergroup relations among their personnel.

### Originality/Value

To our knowledge, this study is the first investigating the impact of organizational diversity ideologies on intergroup relations at work, and its underlying processes.

### **Workplace aggression in teams: The moderating role of the conflict management styles and the relation with ethical climate**

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#### **Purpose**

Workplace aggression can be defined as "efforts by individuals to harm others with whom they work, or have worked, or the organizations in which they are presently, or were previously, employed" (Neuman & Baron, 1998). The main objective of this research was to explore the perception of workplace aggression in teams. In order to achieve this aim we considered two objectives for this research. In a first moment, we studied the mediating effect of the perception of workplace aggression in teams on the relation between ethical climate and team performance. Next, we analyze the moderating effects of management conflict styles on team workplace aggression.

#### **Design/Methodology**

A total of 223 volunteers from the general working population were invited to participate in this study. To enhance the external validity of the study the sample was drawn from different organizations and participants held different occupations. The Workplace Aggression Questionnaire (Vicente & D'Oliveira, 2010, 2011) was adopted to measure the perception of frequency of workplace aggression in teams. The perception of team performance was assessed with 3 items from Aubé and Rousseau (2004). The Ethical Climate Inventory (Arnaud, 2010) (18 items) evaluated perceptions of ethical events and relations in the work setting. Lastly, the competitive or cooperative management conflict styles were evaluated with items proposed by Somech et al. (2009).

#### **Results**

Results suggested that perceptions of team workplace aggression have a negative impact on team performance. The moderating and mediating hypothesis was confirmed.

#### **Research/ Practical Implications**

The contribution of this study in what concerns organizational change practices in organizations is also discussed.

### **Am I interdisciplinary? A competency modelling study**

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#### **Purpose**

Interdisciplinary research is often not as successful as expected. There are several specific problems in working together in an interdisciplinary team: diverging disciplinary cultures, specific assumptions, theories and methods differ from discipline to discipline and are a challenge in effective teamwork. In certain research areas, like biomedical engineering, it is inevitable that members of different academic disciplines work together effectively. According to Bronstein's Model for Interdisciplinary Collaboration one critical aspect that influences collaboration contains the personal characteristics of the team members. But so far, little is known about the specific competencies needed in an interdisciplinary collaboration. We tried to build up a model of interdisciplinary competencies to further understand specific requirements in interdisciplinary research.

#### **Design/Methodology**

To model interdisciplinary competencies, we conducted extended qualitative interviews, a critical incident workshop and job requirement analysis with PhD-students and principal investigators (N=14) of an interdisciplinary

research training group in the field of biomedical engineering and constructed a competency model which was validated by several experts in interdisciplinary research.

#### Results

A competency model including professional, methodological, social and personal competencies was conducted.

#### Limitations

As the competency model was built mainly on the results in the field of biomedical engineering it remains to be tested if it is valid in different research areas.

#### Research/Practical Implications

The model could be used to develop specific trainings to promote interdisciplinary competencies and could therefore help improving interdisciplinary research.

#### Originality/Value

As far as we know, this study is the first attempt to build up a competency model in interdisciplinary collaboration.

### **Teamwork in the treatment of substance addiction - A study of interactions among Norwegian team based health and social workers**

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#### Purpose

The aim of this study was to explore team processes among therapists working with addiction treatment. It is assumed that team processes are related to treatment quality. Research on team efficiency claims that distinctive competencies are needed to perform well (Salas, Sims & Burke, 2005). Team working has been lauded as a key to quality addiction treatment in Norway. However, services have also been criticized for lack of quality and

efficiency (The Norwegian board of health supervision, 2007; Office of the Auditor General of Norway, 2010). This study explored processes leading to good treatment quality for patients suffering from substance use issues.

#### Design/Methodology

Six interviews were conducted with experienced therapists working in teams. A qualitative method was applied during analysis, using guidelines from Grounded Theory (Charmaz, 2000; 2006).

#### Results

Analysis supported the development of The Milieu Teamwork Model, comprising four important categories. The core category; Team relation subsumed the main categories of Mutual understanding, Backup behavior and Social support. Social support was found to be a salient factor influencing both treatment quality and psycho-social working environment.

#### Limitations

Further studies could test these results in a larger population of teams.

#### Research/Practical Implications

Results imply that social support should be further explored in relation to performance and efficiency. Research is especially needed for teams working in stressful conditions.

#### Originality/Value

These findings differ from established theories of teamwork, with the salient role of social support in relation to the output of these teams. This may serve to fill a gap in existing knowledge of team processes.

### **Markers of team aggression: Towards a true multilevel approach to workplace aggression**

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#### **Purpose**

Workplace aggression can be defined as "efforts by individuals to harm others with whom they work, or have worked, or the organizations in which they are presently, or were previously, employed" (Neuman & Baron, 1998). The main objective of this research was to identify behavioral markers of workplace aggression in teams. Although the literature considers individual expressions of aggression, the paper explores how such behaviors and attitudes may be aligned within a group thus creating a different and stronger effect. The identification of group aggression as a distinct phenomenon creates the need for a true multilevel preventive approach.

#### **Design/ Methodology**

Twenty eight adults working for consultancy firms and included in work projects were invited to participate. To enhance the external validity of the study and reduce the reactivity, the sample was drawn from different consultancy teams and organizations. The adoption of a focus group methodology led to the organization of several working sessions, where groups of seven consultants discussed several topics associated with their work environment and conflicts in their teams.

#### **Results and implications**

Data was analyzed with NVIVO program and followed the recommendations of Bardin. Qualitative results will be presented and discussed with recommendations for further investigation and interventions.

#### **Value**

A multilevel approach to workplace aggression is proposed in this paper. In contrast to the

majority of literature and the aggregating procedure adopted, the paper suggests that different markers of group aggression should be considered if one is interested in exploring interpersonal workplace aggression at the team level.

### **The downside of human redundancy: Modeling social influences in sequential decision-making processes**

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Within organizations the mistakes of single individuals should often be compensated by letting several individuals solve the problem. In high reliability organizations, for instance, this so-called redundancy principle is applied to increase the system's overall reliability in monitoring technical system performance. One downside of this principle is that instead of investing effort in coming up with their own independent evaluation of a problem, individuals might simply rely on the judgment of others. Therefore it appears important to examine whether and how individuals' decisions are influenced by the decisions of others.

We addressed this question with a sequential decision-making task. We explain the behavior in this task by a social influence model, which enables us to quantify the impact of individual and social influences on people's decisions. To explore social influences on people's decisions we conducted two studies. Study 1, which embeds the task into an abstract urn and balls setting, showed that participants (N=40) inferred information from others' behavior to make their decisions, illustrating the informational influence of others. In Study 2 (N=40) the abstract decision problem of Study 1 was embedded in a medical decision-making context and situations were examined in which both informational and normative influences could affect participants' decisions. The social



influence model showed that in situations of informational and normative influence people on average give their own individual information less weight relative to the weight given to socially inferred information. The results will be discussed in the light of improving the outcomes of sequential decision-processes.

### **Affective and cognitive team constructs: The reciprocal relationship between team affective climate and team potency**

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#### **Purpose**

Positive affective team experiences have proven to influence cognitive aspects found in team potency (e.g. Gully et al., 2002). Moreover, scholars suggest that teammates who believe their work team to be effective are likely to share positive emotions (e.g. Hu & Liden, 2011), implying a reciprocal relationship between team potency and team affective climate. The purpose of this study is to understand how these two important antecedents of a key organizational variable like performance connect reciprocally with one another. Specifically, we tested the reciprocal relationships between two dimensions of team affective climate (negative and positive team affective climate) and team potency.

#### **Design/Methodology**

We analyzed a longitudinal data set of 141 work teams from three Spanish banks by using a 2-wave panel design with time lags, separated by six months.

#### **Results**

By comparing a series of nested models, findings confirmed the longitudinal reciprocal simultaneous relationships between team affective climate dimensions and team potency.

#### **Limitations**

One of the study's weaknesses is that concurrent effects of the reciprocal causation model could not be interpreted because of large standard errors. Despite this, the longitudinal reciprocal relationships between these affective and cognitive variables are supported.

#### **Research/Practical Implications**

Results support the positive team-fueling effects that team potency and team affective climate have on each other and possible important outcomes such as performance (Guzzo et al., 1993; Fredrickson & Joiner, 2002).

#### **Originality/Value**

Results also show the need of increasing our understanding the relationships between other affective and cognitive organizational variables and how they foster organizational outcomes.

### **When do leaders interact too much? Exploring non-linear and moderated relationships between the frequency of the interactions and team affective climate**

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Leadership styles and behaviors are considered critical to foster positive affective climates in work teams (e.g. McColl-Kenedy & Anderson, 2002; Bono & Ilies, 2006, Kark et al., 2003). However it has been pointed out that, in some instances, leadership could be unnecessary or even counterproductive, for example depending on team expertise (e.g. Antonakis & Atwater, 2002; Cardinal & Hatfield, 2000; Frost, 2004). We focus on an important leadership variable, the frequency of the interactions between the leader and the team members (FILTM) and hypothesize that the inconsistent results about the relationship between FILTM and important outcomes such

as team affective climate can be explained because: 1) the relationship is curvilinear, and 2) based on the substitutes for leadership theory (Kerr & Jermier, 1978), the relationship depends on team experience (i.e. tenure) and potency. Hypotheses were tested in a longitudinal data set of 50 work-teams with an average of 4.36 members, by means of hierarchical non-linear regression. After controlling for leaders' support to the team, team size and team affective climate at time 1 results partially confirmed the hypotheses. The relationship between FILTM and team affective climate is curvilinear, with a U-shape for team positive affect ( $p < .05$ ) and an inverted U-shape for team negative affect ( $p < .10$ ). Also, for team positive affect, the relationship is moderated by team tenure and team potency; although in this last case the results are contrary to the expected ones. The results have important practical implications when planning the frequency with which leaders should interact with their teams.

### **A model of organizational climate, team flow and coping strategies**

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#### **Purpose**

Organizational climates seem to decisively influence work execution, productivity, and coping strategies. Building on Csikszentmihalyi's Flow Theory, the authors developed a Team Flow scale for organizational settings, studying its relationships with Ketz de Vries' authenticzotic climates and Esparbès, Sorder-Arder and Tap's coping strategy types. strategies.

#### **Design/Methodology**

This paper presents a model that hypothesizes that a positive (authenticzotic) organizational climate positively influences teamwork flow,

adaptive coping strategies and work performance. Likewise that authenticzotic organizational climates are negatively correlated to less adaptive coping strategies. Finally that teamwork flow positively influences work performance, which is positively correlated to adaptive coping strategies and negatively correlated to less adaptive coping. The validation sample consisted of workers of several areas of business activity ( $N=625$ ). A Structural Equation Model was tested with a different sample of 21 teams, who were players in a logistics competition ( $N=104$ ), using AMOS 18.

#### **Results**

The results show a relationship between a positive organizational climate, teamwork flow and employee performance.

#### **Limitations**

This study was done during a competition. Therefore the authors suggest that the model should be tested in a real work context.

#### **Research/Practical Implications**

The presented findings seem to underline the need for a positive organizational climate, to promote team flow. Knowing that less adaptive coping strategies negatively affect productivity can clarify the need for organizational interventions that foster more adaptive strategies.

#### **Originality/Value**

As far as the authors' know, this is the first study which attempts to measure teamwork flow in an organizational setting, and studying its connections to other established theories.

### **Antecedents of work-team satisfaction: A fresh look on an old route.**

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#### **Purpose**

The relevance of studying unit-level job satisfaction has been highlighted in a recent meta-analytic study (Whitman, Van Rooy, & Viswesvaran, 2010). However, there is a lack of research examining the antecedents of team-satisfaction. A promising area of research is the study of charismatic leadership as antecedent (Whitman et al., 2010). The study of team climate as mediator of that relationship is also suggested by theoretical models considering climate to mediate the relationship between leadership and outcomes. Additionally, longitudinal research on the moderator role of climate strength is needed.

In this study, we examine (1) the role of charismatic leadership promoting team satisfaction; (2) the mediational role of team climate; and (3) the moderator role of climate strength in the relationship between team climate and team satisfaction.

#### **Design/Methodology**

A two-wave panel design was implemented with a sample composed of 155 bank branches.

#### **Results**

The results of the multiple regression analysis show that (1) leadership predicts team satisfaction; (2) team climate partially mediates this relationship; and (3) climate strength plays a moderator role.

#### **Limitations**

Other significant potential antecedents were not considered in this study.

#### **Research/Practical Implications**

This study advances the knowledge about antecedents of team satisfaction and the mechanisms linking leadership and team satisfaction. It also discusses practical implications of these results to design intervention strategies.

#### **Originality/Value**

Several aspects contribute to the value of this study: The examination of charismatic leadership as antecedent, the consideration of mediating and moderating mechanisms and testing the model in a significant sample of teams in a longitudinal design.

### **The relationship between team learning processes and products of work teams in organizations**

*Wilfried Neumann (Univ. Regensburg, DE) [wilfried.neumann@ur.de](mailto:wilfried.neumann@ur.de), Regina Mulder (Univ. Regensburg, DE)*

#### **Purpose**

Dealing with complex task requires work teams to learn (West, 1996). Team learning encompasses processes and products (Jehn & Rupert, 2008), which are theoretically assumed to be reciprocally related (Kozlowski & Bell, 2008).

We conceptualize team learning processes as activities, through which team members (1) collectively share, (2) reflect on and (3) store & retrieve pieces of information. Team learning products are operationalized as team mental model (TMM) on the competences of the team members. The research question is: 'What is the relationship between these processes and products?'

### Design/Methodology

Members of 30 project teams of profit and non-profit organizations filled out a questionnaire. TMM is measured with open questions about project relevant competencies of individual team members. We interpreted and quantified these data. For team learning processes, adapted scales (e.g. Schippers et al., 2007, team reflection; Van Offenbeek, 2001, storing & retrieving) and a new scale (knowledge sharing) are used. Social team climate variables (e.g. safe team climate; Bauer, 2008) are included as background variables.

### Results

Data analysis is in progress. Hypotheses: (1) Positive relations between products and processes of team learning, (2) social team climate variables moderate these relations.

### Limitations

Because of cross-sectional design, inferences about causality cannot be made.

### Research/Practical Implications

Study results will reveal aspects of social team climate and team learning processes crucial for TMM on team member competencies.

### Originality/Value

This is the first study that examines the relationship between team learning processes and TMM on team member competencies. TMM is measured with a new developed method.

# 17. Emotions in the workplace

## Symposia

### Impact of Emotions in Organizations: From Basic to Complex

Session Chairs: *Susanne Scheibe (Univ. of Groningen) [s.scheibe@rug.nl](mailto:s.scheibe@rug.nl), Trude Furunes (Univ. of Stavanger) [trude.furunes@uis.no](mailto:trude.furunes@uis.no)*

#### State of the Art

The notion that moods, emotions, and emotional regulation impact such critical organizational outcomes as decision-making, social relations, performance, and well-being is increasingly acknowledged. Here we present a collection of papers that illustrate just how widespread and manifold such impacts can be.

#### New Perspective/Contribution

The contributions will illustrate emotional effects in organizational contexts ranging from basic to complex, subconscious to conscious, anticipated to actual emotional experience, and from short-term to longer-term effects. The symposium includes four empirical papers and one review article. Pontus Leander and colleagues introduce the affect misattribution theory of intrinsic motivation and present experimental evidence that affective priming can increase intrinsic motivation to learn. Susanne Scheibe presents a scenario experiment testing age effects on memory for emotionally charged messages in work contexts. Results support a positivity bias in memory of older listeners. Stacey Sanders and colleagues examine anticipated guilt as mediator of the link between abusive leadership and deviant behaviour of followers. Trude Furunes and Reidar Mykletun present a field study that links positive emotions (joy, vigor) to older

employees' desire to continue working. Finally, Haver and colleagues review the literature on leadership and emotion regulation, thus adding the perspective that emotions can be regulated in a way that enhances or diminishes work outcomes.

#### Conclusion and Implications for Research/Practice

Taken together, the papers illustrate the many ways that emotions shape organizational life. Practitioners gain insight into basic mechanisms and possible points of intervention that target emotional processes at different levels.

### ***Presentations of the Symposium***

#### **Testing an affect misattribution theory of intrinsic motivation**

*Pontus Leander (Univ. of Groningen) [n.p.leander@rug.nl](mailto:n.p.leander@rug.nl), Aaron Kay (Duke Univ.), Tanya Chartrand (Duke Univ.), Keith Payne (Univ. of North Carolina-Chapel Hill)*

#### Purpose

Lay theories suggest that intrinsic motivation stems from inherent liking or enjoyment for a goal and thus cannot be engendered by external rewards. However, people do not always consciously notice or remember the external rewards they get for pursuing goals, suggesting that perceptions of intrinsic motivation may sometimes stem from nonconscious sources. For instance, subtly conditioning a person to associate a goal with positive affect could lead one to misattribute that positive affect as liking or enjoyment for the goal. Such affect misattribution might often drive perceptions of intrinsic motivation, suggesting a novel means through which intrinsic motivation could be engendered.

#### Design/Methodology/Results

Across seven experiments, participants reported higher intrinsic motivation to learn after the concept of "learning" was experi-

mentally paired with positively valenced images, a pleasant testing experience, or an intrinsically motivating poster that was surreptitiously located in the same room. Consistent with past work on affect misattribution, these effects were extinguished when participants were made consciously aware of the true source of their positive affect.

#### Limitations

No field research; experiments were conducted online with adults or with undergraduates.

#### Research/Practical Implications

These findings suggest that intrinsic motivation can be engendered through a process of affect misattribution. Moreover, they suggest that intrinsic motivation can be enhanced by subtly pairing a goal with positively valenced stimuli.

#### Originality/Value

These studies are the first to demonstrate that affect misattribution can drive intrinsic motivation; our findings also suggest a practical application of implicit social cognition research.

### **Emotional memory in occupational context: The role of audience age**

*Susanne Scheibe (Univ. of Groningen)*  
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#### Purpose

Leaders want to send messages to employees that are memorable and motivating. Given workforce aging, the question arises what leaders can do to adjust their messages to aging employees. Lifespan researchers have found a positivity effect in older adults' memory: While negative information is generally better remembered by young adults, older adults show equal or better memory for positive information. This is explained by older adults' sense of limited time, which leads them to prioritize emotional well-being goals.

Here, we investigated whether the positivity effect can be found in an occupational context.

#### Design/Methodology/Results

Employed participants (N= 156; age 19-67) read a leader's speech about a fictitious company, containing 12 positive and 12 negative statements, and performed a surprise memory task. Results showed an interaction between chronological and subjective age (which is associated with time perspective) on the proportion of positive-to-negative statements recalled. Supporting the positivity effect, participants who were older and felt older remembered relatively more positive than negative statements.

#### Limitations

The study was conducted online and the order of statements was not randomized.

#### Research/Practical Implications

Given workforce aging, business managers need to better understand aging workers, in order to derive strategies to optimally motivate them. Results show how messages can be better tailored to older adults.

#### Originality/Value

Research on emotion in organizations has largely ignored the role of aging-associated factors, while emotional aging researchers have rarely looked at work outcomes. This is the first time that the positivity effect is investigated in organizational context.

### **Employee deviance in reactance to supervision styles: The mediating role of anticipated guilt**

*Stacey Sanders (Univ. of Groningen)*  
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#### Purpose

Employees' workplace deviance has costly consequences for organizations worldwide.



Each year billions of dollars are lost due to employee theft, insurance costs, and lost businesses. In reaction to these daunting figures, scholars have increasingly pointed to the role of leadership in shaping (un)ethical behaviors in organizations. Drawing on social learning theory and social exchange theory emerging research has positively associated leader's abusive supervision style to employee deviance, whereas leader's ethical supervision style has been negatively associated with employee deviance. However, little is known about why employees' engage in or refrain from deviant behavior. We aim to add to the existing literature by focusing on employees' anticipated feelings of guilt as a possible underlying mechanism.

#### Design/Methodology/Results

Across three studies (i.e., an experiment, a scenario experiment, and field study) we found that participants faced with an abusive supervisor, as compared to an ethical supervisor, show higher levels of deviance via lower levels of anticipated guilt.

#### Limitations

Experiments were conducted with undergraduates, but our field study relied on data derived from employees.

#### Research/Practical Implications

From a theoretical perspective, our findings show that anticipated feelings of guilt play a role in self-regulating deviant behavior. From a practical perspective, our findings suggest that investing in selecting and/or training ethical leaders can help organizations reduce employee deviance.

#### Originality/Value

To our knowledge, the present research is the first to show that anticipated guilt mediates the relationship between supervision styles and employee deviance.

### **The role of positive emotions in prolonging older workers' careers**

Trude Furunes (Univ. of Stavanger) [trude.furunes@uis.no](mailto:trude.furunes@uis.no), Reidar J. Mykletun (Univ. of Stavanger)

#### Purpose

Previous research shows that positive emotions, such as vigor, predict employees' good health and proactive behaviors (Shirom, 2010). Positive emotions may allow employees to effectively cope with work-related demands, and increase employee well-being. Hence, the aim of this paper is to explore whether employees' feeling of vigor, mastery, and joy of work can predict timing of retirement.

#### Design/Methodology

Data was collected by self-reported questionnaires, from an industrial engineering company, and consists of 449 employees' evaluation of positive emotions, health, relation to superior, and timing of retirement. Vigor is measured by a revised and translated version of Shiroms' vigor scale (Shirom, 2003).

#### Results

Correlation analyses show that invigorated employees are more committed, report higher levels of job satisfaction, closer relationship to their superiors, mastery of their job and look forward to going to work, for all types of vigor. When it comes to timing of retirement, invigorated employees would like to continue working full time. Employees who would like to retire early report low levels of vigor. Hierarchical regression analysis predicting late retirement indicates that physical strength and emotional energy have prediction power. However, this effect is reduced when joy of work is introduced. The model explains 17 percent of the variance.

#### Limitations

The study is cross-sectional. Results should be tested on panel data.

**Research/Practical Implications**

Research on predictors of early or late retirement could have implications both for practitioners and policy makers.

**Originality/Value**

The research is among the first to study the role of positive emotions on retirement intentions.

### **Emotion regulation related to leadership: State of the art and future research agenda**

Annie Haver (Univ. of Stavanger) [annie.haver@uis.no](mailto:annie.haver@uis.no), Kristin Akerjordet (Univ. of Stavanger), Trude Furunes (Univ. of Stavanger)

**State of the Art**

Regulating one's emotions is considered a key competence associated with effective and good leadership and is essential in relation to how people deal with negative emotions to reduce potentially adverse outcomes.

**New Perspective/Contribution**

This integrative review reveals that, although emotion regulation plays a central role in the leadership process, there is limited research on emotion regulation related to leadership. Three themes emerged from the analyses: i) Emotion regulation strategies as facilitators of health; ii) Emotion regulation strategies as facilitators of job outcome, and iii) Emotion regulation as barriers to health and job outcomes. Leadership styles, emotional competencies, the quality of leader-member relationships, and organizational roles seem particularly important for the efficiency of emotion regulation. Future research agenda will be proposed.

**Research/Practical Implications**

The studies had varying degrees of focus on methodological procedure, clarity and bias, limitations, and ethical rigor. Convenience sampling dominated the studies, and many had small samples, student samples, or suf-

fered from relatively low response rates. Furthermore, the impact of the leaders' emotion regulation related to the employees performance and health should be further explored and described. Finally, leaders need to become more aware of their critical role (power) and responsibilities due to emotion regulation to contribute to more effective, healthy, and adaptable organizations.

**Originality/Value**

A systematic literature review of empirical articles from January 2000 to May 2012, identified 21 studies. This is the first integrative review on emotion regulation related to leadership, and includes both qualitative and quantitative research from leaders' and employees' perspective.

## **Extending our Understanding of Emotion Regulation in the Workplace: New Evidence for the Effects of Interpersonal Emotion Regulation on Performance, Relationships and Well-being**

Session Chairs: David Holman (Univ. of Manchester) [david.holman@mbs.ac.uk](mailto:david.holman@mbs.ac.uk), Karen Niven (Univ. of Manchester) [karen.niven@mbs.ac.uk](mailto:karen.niven@mbs.ac.uk)

**State of the Art**

Research on the effects of emotion regulation in organizations has typically focused on how employees regulate their own emotions, a process known as intrapersonal emotion regulation. This research has highlighted the effects of intrapersonal emotion regulation on performance outcomes (e.g., customer satisfaction) and employee well-being (Holman et al., 2008). More recently, research has begun to examine how employees intentionally try to regulate the emotions of others, a process known as interpersonal emotion regulation (IER) that includes affect-improving strategies,

such as complimenting and humor, and affect-worsening strategies such as criticism (Niven et al., 2009). Although research to date has established the everyday nature of IER in a variety of working contexts (e.g., hospitals, prisons), less is known about the effects of IER, or whether IER can be altered via workplace interventions.

#### New Perspective/Contribution

The symposium contributes to our understanding of the criterion space of emotion regulation by examining the effects of IER with regard to three key types of outcome. These are performance outcomes (customer service evaluations, customer performance), relationship outcomes (the development of new relationships), and well-being. The strength of the symposium is enhanced by the rigor and plurality of methods used (i.e., dyadic surveys, a social network study, a quasi-experiment, and a diary study) and the variety of contexts studied (e.g., retail, prison, education).

#### Conclusion and Implications for Research/Practice

The studies point to the importance of training employees in IER, and the quasi-experiment study shows how this might be done.

### ***Presentations of the Symposium***

#### **Interpersonal emotion regulation - Make customers happy and you'll feel good too**

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##### Purpose

Ensuring that customers have a positive experience during service interactions is an important aim for most service roles. Previous studies have shown that service workers can achieve this aim by using intrapersonal emotion regulation strategies to hide or suppress

their own negative emotions and to display positive emotions towards customers. However, little research has examined whether service workers can achieve this aim by using interpersonal emotion regulation (IER) strategies to directly influence the customer's mood and service evaluations. In our study, the aim was to investigate the influence of affect-improving IER on customer service evaluations in service interactions.

##### Design/Methodology

Thirty-two service workers in German service organizations rated their interpersonal and intrapersonal emotion regulation and their expressed emotions in interactions with customers. We also asked 283 customers to evaluate service quality and level of appreciation and to rate the emotions and proactivity of the service worker.

##### Results

Results show that service workers use affect-improving IER to influence their customers' emotions and often do this in conjunction with deep acting strategies. Affect-improving IER correlated with service workers' expressed emotions, and was also found to correlate positively with service evaluations by the customer, customer appreciation, and customer-ratings of employee proactivity.

##### Limitations

Further investigations in more service interactions are necessary to generalize results.

##### Research/Practical Implications

Results show that service workers can improve customer service by using IER. Training in this behavior may be beneficial for organizations.

##### Originality/Value

In our study we used two sources to investigate IER in service interactions.

### **Employee emotion regulation and customer performance: A study of driving instructors and learner drivers**

David Holman (Univ. of Manchester) [david.holman@mbs.ac.uk](mailto:david.holman@mbs.ac.uk), Karen Niven (Univ. of Manchester)

#### **Purpose**

Improving customer performance is central to a number of service roles, e.g., coaches, instructors. This paper examines whether driving instructors' interpersonal emotion regulation (IER) and affect influence learner driver performance, and whether these relationships are mediated by learner driver affect.

#### **Design/Methodology**

Matched data were collected from 99 pairs of driving instructors and learner drivers in the UK. Instructors completed measures of the learner driver's performance and their own affect. Learners completed measures of the instructor's IER strategies and their own affect.

#### **Results**

Mediation analysis in Mplus (with bootstrapping to calculate bias corrected confidence intervals for the indirect effect) revealed a) the relationship between instructor affect-improving IER and learner performance is mediated by learner affect b) the relationship between the instructor affect and learner performance is mediated by learner affect (i.e., an affect contagion effect).

#### **Limitations**

The study could be replicated in other samples where improving customer performance is an aim, e.g., coaches.

#### **Research/Practical Implications**

The study suggests that driving instructors can improve learner driver performance by a) using affect-improving IER strategies to influence learners' affect, and b) trying to ensure that their own affect is positive.

#### **Originality/Value**

The study is the first to demonstrate that employee emotion regulation affects customer performance; that this occurs through its effects on learner affect; and that these effects are in addition to affect contagion effects. Another strength of the study is that self and other reported data are used.

### **Effects of interpersonal emotion regulation on the evolution of social and work networks**

Niven Karen (Univ. of Manchester) [karen.niven@mbs.ac.uk](mailto:karen.niven@mbs.ac.uk), Per Block (Univ. of Oxford), Ilmo van der Lowe (Univ. of Oxford), Warren Mansell (Univ. of Manchester)

#### **Purpose**

This paper explores how trying to improve others' emotions using interpersonal emotion regulation (IER) affects the development of relationships over time within new organizational networks.

#### **Design/Methodology**

Data from three networks (N = 27; N = 31, N = 18) were collected. Each network was a group of students beginning a Masters course in the UK. Data were collected at the start of the course and every third week thereafter for the first semester (providing four time-points). On each occasion, respondents indicated their social and work-related ties with other network members, as well as their use of IER towards network members.

#### **Results**

Longitudinal analyses in RSiena revealed that, while people who used affect-improving IER were more attractive as friends and work-mates when it came to forming new friendships, IER use also caused fellow network members to break off social and work-related ties once they were established. Thus while IER may be an effective short-term strategy

for socializing in organizations, in the longer-term it may be detrimental.

#### Limitations

The study could be replicated within a working sample, e.g., new starters in an organization.

#### Research/Practical Implications

Although affect-improving IER has positive short-term benefits for relationship building, in the longer-term, it may cause people to distance themselves from high users of IER, perhaps because it is viewed as disingenuous. When entering a new organization or team, IER should therefore be used sparingly.

#### Originality/Value

The longitudinal analysis from the formation of a network onwards provides insight into how IER affects relationship evolution. Findings are replicated across three networks.

### **Interpersonal emotion regulation, emotions and job seeking behaviour among older unemployed adults**

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#### Purpose

Older unemployed adults are a specific risk group, as they have more trouble getting re-employed than younger individuals, and experience low levels of well-being. This study examines how the use and receipt of interpersonal emotion regulation (IER) with older unemployed adults support networks affects their daily emotions and job seeking.

#### Design/Methodology

Sixty-nine unemployed Spanish job-seekers completed five short questionnaires every day for 25 days on a smartphone application. Items concerned: IER strategies used towards others; IER strategies used towards the per-

son, positive and negative emotions, and job seeking behavior.

#### Results

Results demonstrated that participants who received affect-improving IER from others on a daily basis reported higher daily levels of joy and lower levels of anger, fear, disgust, and sadness. The opposite pattern was found for those receiving affect-worsening IER. No significant relations were found between the daily use of IER by participants towards others and participants' daily emotions. No significant relations were found between the daily use of and receipt of IER and daily job seeking behavior.

#### Limitations

There was no employed comparison sample. IER was only assessed when participants indicated that another person was the cause of their emotions.

#### Research/Practical Implications

Practically, the results suggest that interventions aimed at helping older unemployed adults regulate emotions within their social networks would be beneficial for well-being.

#### Originality/Value

Results demonstrate that IER can influence affect on a daily basis and contribute to understanding of how older adults cope with unemployment. Emotion regulation had not been studied before among older unemployed adults.

### **An occupational health training program to improve the prison staff's interpersonal regulation of inmates' affect**

*David Martinez-Íñigo (Rey Juan Carlos Univ.) [david.martinez@urjc.es](mailto:david.martinez@urjc.es), Antonio Crego (Rey Juan Carlos Univ.)*

#### Purpose

A growing number of studies show that employees' use of interpersonal emotion regula-

tion (IER) strategies can impact on their own well-being. For example, when employees use affect-worsening IER strategies to make a target feel worse, this can also reduce their own well-being. Drawing on these results, a training program was implemented to improve prison staff's regulation of prisoners' affect in two Uruguayan prisons.

#### Design/Methodology

A quasi-experiment was used. In the experimental group, 13 prison officers attended 10 weekly short training sessions on the nature and effects of IER. Thirteen prison officers were in the control group. Pre and post-test surveys were administered.

#### Results

RM-ANOVA showed a significant interaction between condition and time. For participants receiving the training, the use of affect-worsening IER strategies decreased and staff well-being increased. In the control group, the opposite pattern was observed. Among the sample as a whole, decreases in affect-worsening strategies were associated with increase in well-being.

#### Limitations

Sample size was small and participants were not randomly assigned to conditions.

#### Research/Practical Implications

Results suggest that the intervention could be used to reduce employee use of affect-worsening strategies, which in turn may have a positive effect on well-being.

#### Originality/Value

This study is the first to examine the effectiveness of an occupational health intervention focused on IER.

### Single Papers

#### **The high cost of workplace anxiety and the buffering effect of workplace social exchange**

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#### Purpose

Drawing from Conservation of Resource and Social Exchange Theories, we predict that workplace anxiety has a detrimental effect on job performance, and that this relation is mediated by emotional exhaustion. We further predict that the quality of employees' social exchange relationships (leader-member exchange [LMX] and team-member exchange [TMX]) will mitigate the harmful effect of workplace anxiety on job performance.

#### Design/Methodology

We tested our predictions in two field studies (N=242; N=267) of police officers. Officers completed anxiety and emotional exhaustion measures, supervisors/peers completed social exchange measures, and supervisors provided job performance ratings.

#### Results

As predicted, our SEM models indicated that emotional exhaustion mediates the link between workplace anxiety and job performance. Also as predicted, TMX buffered the relation between anxiety and emotional exhaustion, while LMX buffered the relation between emotional exhaustion and job performance.

#### Limitations

Our focus on police officers was consistent with our research questions, as anxiety is a serious concern among police organizations. The extent to which our results generalize to other occupations remains to be tested.



**Research/Practical Implications**

Our findings indicate that supportive peers and supervisors can play a powerful role in reducing the potentially harmful effects of workplace anxiety. Thus, both organizations and individual employees will benefit from continuously working to improve employee-peer and employee-supervisor relationships.

**Originality/Value**

We are the first to demonstrate that workplace anxiety has an effect on resource depletion via emotional exhaustion. We are also the first to highlight the vital role of social exchange in buffering the relation between anxiety and performance.

**The impact of disconfirming managerial communication on employee emotions, and the moderating effects of relationship quality, emotion regulation and employee trait negative affect**

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**Purpose**

Integrating research from the fields of emotions (i.e. Dasborough, 2006), interpersonal communications (i.e. Sieburg, 1976), and leader-member exchange (i.e. Uhl-Bien & Maslyn, 2003), we hypothesized that disconfirming managerial communication is positively related to employee negative felt emotion, that this relationship is weaker when perceived relationship quality with the manager is high, stronger for employees with high trait negative affect, stronger when employees use suppression as their emotion regulation strategy, and weaker when they use cognitive reappraisal.

**Design/Methodology**

Two hundred and seventy five working adults rated the extent to which their managers used disconfirming and confirming communications

during disagreements, their felt emotions, their overall relationship quality with their managers, their trait positive and negative affect at work, and their use of suppression and cognitive reappraisal to regulate their emotions.

**Results**

Using moderated multiple regression all hypotheses except those pertaining to emotion regulation were supported.

**Limitations**

Further research is needed to confirm the generalizability of the findings to "no disagreement" discussions, and results could have been affected by the instruction to recall a multitude of disagreements not just one.

**Research/Practical Implications**

The study supports LMX research, adds to AET by confirming the moderating role of individual dispositions and the C/DMCI is useful for management training.

**Originality/Value**

The study is the first of its kind to integrate research from emotions, LMX and interpersonal communications, and it reintroduces the confirming/disconfirming communication model to the field of organizational psychology/behaviour. The study is also original in demonstrating relationship quality as a buffer to negative emotions.

**A diary study on the relationships of distinct work events with job features and affective states by using a work event taxonomy**

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**Purpose**

Affective events theory (AET) highlights the importance of work events as antecedents of affective states. However, research has so far

lacked propositions about the kind of work events that elicit certain positive or negative affective states. Our goal was to provide insight into the kind of events that occur frequently in the workplace by systematically classifying positive and negative work events and by investigating more fine-grained relationships between job features, distinct work events, and affect as proposed in AET.

#### Design/Methodology

A taxonomy of four positive and seven negative work event clusters was developed and applied in a diary study on 348 employees.

#### Results

Multilevel regression analyses showed that daily work events functioned as mechanisms in the relationship between daily job features and affective states. For instance, positive events from the cluster goal attainment, task-related success mediated the relationship between job autonomy and complexity with positive activated affect. Negative events from the cluster ambiguity, insecurity, loss of control mediated the relationship between time pressure, job autonomy and complexity with negative activating affect.

#### Limitations

As one limitation, our results cannot ensure causality.

#### Research/Practical Implications

Our research provides a basis for the refinement of AET. It helps to develop some clearer predictions on which kinds of events are judged as important in the work day.

#### Originality/Value

By examining distinct work events as antecedents of affective states, a better understanding of affective experiences at work is possible. Further, we provide a comprehensive checklist that can be used in future diary studies to assess work events.

### **Recipe for burnout in service jobs: Be sensitive to others and suppress your emotions**

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#### Purpose

Emotion recognition is a core component of emotional intelligence and supposed to be crucial in high emotional labor jobs, e.g. in psychotherapy (Joseph & Newman, 2010). While emotion recognition may improve rapport with clients, we argued that it may also relate to symptoms of burnout in certain circumstances: When service providers are lacking in emotion management skills and suppress their true emotions in client interactions instead of regulating them more functionally.

#### Design/Methodology

We tested this hypothesis with a sample of  $N = 361$  psychotherapists. We applied a performance-oriented test to measure emotion recognition ability (DANVA2; Nowicki, 2010) and asked for psychotherapists' burnout level as well as their tendency to suppress either anger, sadness, anxiety, or happiness in client interactions.

#### Results

Hierarchical regression analyses confirmed the hypothesis: Burnout level was highest among psychotherapists with high emotion recognition ability who suppressed their emotions (anxiety, anger, sadness, and happiness) at work.

#### Limitations

The data were cross-sectional.

#### Research/Practical Implications

These results imply that sensitivity to clients' emotions is a double-edged sword: It may improve rapport with clients but go along with higher risk for burnout when not combined with emotion management skills.

**Originality/Value**

This study is among the few showing that emotion recognition, an indicator of emotional intelligence, may increase stress.

### **Recovery and emotion regulation as predictors of employee adaptability and well-being**

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**Purpose**

In her multi-dimensional model for individual adaptability, Van Dam (2013) emphasizes the importance of emotion regulation for employee adaptability. Previous research suggests that recovery experiences might contribute to effective emotion regulation.

The present study aimed to investigate the relationships between recovery and emotion regulation and the importance of these antecedents for employee adaptability and well-being. It was hypothesized that recovery experiences (mastery & psychological detachment) would relate to emotion regulation strategies (reappraisal, reflection, attentional deployment), which in turn would positively relate to employee adaptability and indicators of well-being.

**Method**

An online questionnaire was distributed through the network of the researcher. A total of 325 participants (all employees with a paid position) filled out the questionnaire. Pilot studies were conducted to test the reliability and validity of the new developed scales for emotion regulation strategies.

**Results**

The outcomes of a SEM analysis supported the research model to a great extent.

**Limitations**

The cross-sectional design of the study hinders drawing causal inferences.

**Research/Practical implications**

The findings suggest that organisations and employees could pay more attention to recovery experiences and emotion regulation in order to create a more adaptive, happy and healthy work force.

**Originality/Value**

This is one of the first studies trying to unravel the processes underlying employee adaptability. Moreover, this study extends emotion research by focusing on the role of emotion regulation for employee adaptability.

### **We're all in this alone; Emotional Labour, MPs and the UK Parliament**

*Richard Kwiatkowski (Cranfield Univ., UK)*  
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**Purpose**

This study examines how emotions impact on political functioning and suggests that if we "imagine the future world" similar issues will arise. Politicians are called upon to actively vote, in their own person, by physically going through a lobby, on matters of life and death, for example invasions, sanctions or troop deployments; this is highly emotional work.

**Design/Methodology**

The data is based on 1:1 political interviews undertaken from 1997-2010. It is part of a longitudinal study examining culture and change in the UK parliament. It uses the lens of two particularly traumatic and emotional times, first that of the invasion of Iraq and secondly on the 'expenses scandal' of 2009.

**Results**

During these two contrasting events; one where soldiers (and civilian) lives were being risked, and the other where political careers were threatened, surprisingly similar states were accessed by respondents, in particular isolation and fear. Periodicity and duration were important factors in the sense making

undertaken by MPs, and these ameliorated the emotions, particularly in hindsight.

#### Limitations

The study suffers from the usual limitations of highly confidential interview based design.

#### Research/Practical Implications

The study shows that emotional labour can lapse into emotional overload very quickly if institutional factors (eg rituals) which one might expect to ameliorate debilitating emotions paradoxically serve to exacerbate them. This has important implications for long term functioning and decision making.

#### Originality/Value

This study uses unique access to a panel of MPs over an extended period. It contributes to the theme of the conference by emphasising the need to use psychological insights in planning organizational systems.

### **Terror-management after hazardous substance exposure at work**

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#### Purpose

Hazardous substance exposure at work increases the risk for specific illnesses and potentially reduces individual life expectancy. According to Terror-Management Theory (TMT), experienced health threats are linked to increased mortality salience, which elicits defence strategies to remove these death-related thoughts from our consciousness. The purpose of the present study was therefore to apply TMT to a workplace setting.

#### Design/Methodology

Workers participating in surveillance programs were surveyed regarding their perceived health threat, their mortality salience and their coping strategies related to their exposure. The first cross-sectional study included N

= 292 male formerly asbestos exposed workers. The second longitudinal study included N = 145 participants, which had been exposed to Polychlorinated Biphenyls followed up after one year.

#### Results

In both studies mortality salience partially mediated the relationship between the perceived health threat and coping behaviour (active and avoidance). The more individuals report experiencing their exposure as health threatening, the more salient is mortality to them, which increases the avoidant and active coping behaviour. This threatening effect also lasts for a time period of one year.

#### Limitations

The data of this study relies on self-report as it was collected in an applied setting.

#### Research/Practical Implications

Researchers have to further analyze which conditions foster proactive vs. avoidant coping behaviours.

#### Originality/Value

To our knowledge this is the first study to (longitudinally) apply TMT in a workplace setting after a real occurring mortality cue.

### **Developing and testing a measure of career regret**

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#### Purpose

The career has been identified as an important source of regret in people's lives but to date there are no empirically tested measures of career regret, limiting the extent to which this concept can be reliably investigated. Given the importance of a valid measure for robust research, the purpose of this study was to de-

velop and test a measure of career regret, focusing on its construct validity.

#### Design/Methodology

The authors reviewed relevant literature to develop a measure which was then tested using different samples of professional workers. Cross-sectional data were collected using a quantitative survey in both the UK and Portugal at different time points. A total of approximately 1600 employees were surveyed. Having developed and tested a measure using UK data, the scale was further developed then validated using Portuguese data.

#### Results

The results of factor analysis, reliability analysis and nomological network analysis support the operationalisation of career regret in the present study.

#### Limitations

There is scope for further work using a more varied sample and to provide a fuller explanation of antecedents and correlates.

#### Research/Practical Implications

Careers and work are a key source of regret for many individuals. Understanding the causes and implications of career regret allows organisations and individuals to design strategies to address this emotion and potentially circumvent it.

#### Originality/Value

This is the first tested and validated measure of career regret available for use in work and organisational psychology.

### **Affective team climate and psychological distress in team workers**

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#### Purpose

We test whether levels of psychological distress in team members are affected by the team's affective climate. Although organizational climate has received considerable attention since WWII, the outcomes of the organization's affective dimension have seldom been studied. We expect that the affective team environment in which workers have to perform on a daily basis, play a significant role in the development of psychological distress, both as a main effect and in interaction with stressful job conditions.

#### Design/Methodology

We use hierarchical logistic regression to analyze data on 1,098 workers formally organized in 97 teams in a car factory in Belgium.

#### Results

Our analyses show that the affective climate within a team, emerging from and reproduced within every day social interaction between team members, has a significant role of its own in the well-being of team members. When the affective team climate is positive, everyone within the team benefits, even those team members who hold a negative perception of the emotional work environment.

#### Limitations

Our study focused on a male-dominated, largely blue-collar worker workplace. It remains to be tested how much our findings generalize to other work settings.

#### Research/Practical Implications

These results imply that organizations should invest in a positive affective team climate, as it forms both an individual and organizational asset.

#### Originality/Value

To our knowledge, this is the first multilevel study to analyze the impact of affective team climate on psychological distress in team members.

## Posters

### Cross-national study of emotional labor

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#### Purpose

Emotional labor, the regulation of the employees own emotions to meet organizational expectations despite their own feelings (Grandey, 2000), is related to significant workplace outcomes. This research analyzed differences in the impact of the emotional labor strategies (deep acting and surface acting) on job satisfaction, turnover intention, commitment, and emotional strain, as well as their relationships with other variables like support, organizational justice and trust.

#### Design/Methodology

A sample of 642 employees from USA (N= 200), Armenia (N=150) and two samples from Turkey (N= 292) completed the following scales: Emotional Labor, Organizational Support, Coworker Support, Supervisor Support, Job Satisfaction, Turnover Intention, Emotional Well being, Organizational Justice Scale, Organizational Commitment and Trust in Organization. Scales which were not available in Turkish or Armenian were translated and back translated by bilingual speakers.

#### Results

The results showed differences between the samples. Deep acting shows similar relationships between countries, but Surface acting had no relationship with the other variables except in the USA.

#### Limitations

Although all the participants are working in customers services, the two Turkish samples basically work in tourism.

#### Research/Practical Implications

The results showed the importance of the country in the impact of the emotional labor strategies. Future research should focus on other countries and the relationships between cultural variables e.g. individualism-collectivism and emotional labor strategies. Understanding cross-national differences will allow organizations to develop appropriate strategies to alleviate negative effects of emotional labor.

#### Originality/Value

This research is the most extensive cross-national study to date, and the first examination with USA, Turkey and Armenia countries.

### Show me that I can trust you: Leader emotion display predicts dimensions of follower trust

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#### Purpose

Trust in leaders is determined by three facets (perceived ability, benevolence, and integrity) and has been found to foster subordinates' performance (Colquitt, Scott, & LePine, 2007). Leaders' emotional display is assumed to serve as one of the most important determinants of followers' trust in the leader (Gardner, Fischer, & Hunt, 2009) and previous research already indicates systematic effects of leaders' emotion expressions on followers' trust as a function of displayed emotions' general valence (Shipman et al., 2010). Extending this promising finding, our research addresses the open question of which discrete



emotions displayed by leaders distinctively influence the three determinants of trust. Therefore, we examine the differential effects of three positive (pride, gratitude, happiness) and three negative (anger, shame, sadness) emotions on followers' perceptions of leaders' ability, benevolence, and integrity.

#### Design/Methodology

A total of N = 535 student participants took part in our vignette study in which we experimentally manipulated leaders' displayed emotions.

#### Results

Leaders' display of pride heightened participants' perceptions of leader ability, whereas displayed gratitude increased perceived benevolence and integrity. Sadness and shame promoted benevolence perceptions, whereas anger reduced perceptions of benevolence, and sadness those of ability.

#### Limitations

Field research in organizational settings should corroborate these findings.

#### Research/Practical Implications

Our results underline the importance of emotion management for organizational leaders, as they indicate which emotions to display in order to foster specific determinants of their subordinates' trust.

#### Originality/Value

This study is the first to link leaders' display of discrete emotions with distinct determinants of followers' trust in them.

### **„Emotional intelligent labor“: Moderating effects of emotional intelligence dimensions on emotional labor and emotional exhaustion**

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#### Purpose

Research about emotional labor has emphasized the possible detrimental effects on employees' health. The present study responds to the call for further investigations about the role of emotional intelligence (EI) concerning the emotional labor – strain relationship because the influence of EI has not been investigated much in this research field and most studies have treated it as a uniform construct.

It was hypothesized that EI and its subdimensions in particular would moderate the relationship between emotion regulation strategies and situational emotional exhaustion. In detail, a high level of EI was expected to buffer negative consequences.

#### Design/Methodology

We carried out a diary study with 188 service employees from financial institutes who completed a questionnaire (Level 2: person-level) including measures of EI. In total, 865 customer interaction protocols were collected (Level 1: day level).

#### Results & Limitations

HLM results supported the hypothesis that EI moderates the emotional labor – strain relationship in multifaceted ways. Especially the subscale “managing self” moderated the relationship of diverse emotion regulation strategies with regard to exhaustion. Further results and limitations will be discussed.

#### Research/Practical Implications

The results may be useful to improve the development of practical training programs in organizations in order to beneficially influence the employees' health.

#### Originality/Value

To our knowledge, this study is one of the first to examine the influence of EI and its subscales on the emotional labor process and consequences using multilevel analysis.

### **Coping strategies in the service industry when being exposed to emotional labour**

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#### **Purpose**

To investigate coping strategies on individuals who perform Emotional Labour (EL) in the service industry.

#### **Design/Methodology**

Qualitative data was obtained by using vignettes on a convenience sample of 10 cabin crew based in an airline in the Middle East, from different backgrounds. The interviews took approximately 1 hour to complete, as semi-structured questions were asked.

#### **Results**

Cabin crew seemed to cope better when they dealt with actual on the jobs issues, than to think about their personal issues, as it kept them focused on the job. Overall, different coping dimensions were used by cabin crew, such as active coping, planning, suppression of competing activities, seeking social support, focusing on venting emotions, mental disengagement, and most importantly acceptance (Carver, Scheier & Weintraub, 1989), which appeared to be the common method used by almost all cabin crew.

#### **Limitations**

A limitation of the study, is that a vignette examining intentions to leave could have been added, in order to explore if the interviewed crew were planning to leave, and if this was the case, for which reasons. This could be added in future studies as qualitative methodology is gaining ground in psychological research.

#### **Research/Practical Implications**

In future studies, quantitative measures such as the COPE (Carver et al., 1989) could be used in conjunction to vignettes, as coping skills in individuals who perform EL has not been

widely studied, and future research would need to address this.

#### **Originality/Value**

Limited research has been conducted on coping mechanisms in performing EL whether from a qualitative or a quantitative perspective.

### **Individual values and emotional labor in teacher burnout job demands-resources model**

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#### **Purpose**

This study examines the effect of the relation between job demand variables (emotional labor, student expectations, psychological demands) and job resource variables (individual values, social support and decision latitude) on the dimensions of burnout and work engagement in a sample of Italian teachers.

#### **Design/Methodology**

Participants: a sample of voluntarily recruited Italian teachers (N=420) of primary and secondary school.

Measures in Italian version: Emotional Labour Scale (ELS-Brotheridge & Lee, 1998) composed of 9 items measuring surface (hide-fake) and deep acting; MBI-GS (Maslach et al., 1996) composed of 16 items measuring the three dimensions of burnout; CSS (Dormann & Zapf, 2004;) the 28 items measure stress conditions typical of the interaction with customers; PVQ (Schwartz et al., 2001) composed of 40 items measuring ten individual basic values; UWES (Schaufeli et al., 2002) composed of 9 items measuring work engagement; JCQ (Karasek et al., 1998) composed of 48 items measuring job content.

### Results

Control, social support and individual values moderate relations between job demand variables and burnout in the teachers. Moreover, disproportionate and ambiguous student expectations play an important role in work engagement.

### Limitations

The administration of questionnaires during working hours might have resulted in the exclusion of the most severe cases of burnout in the teacher members of the school included in this research.

### Research/Practical Implications

Designing training experiences for teachers to enhance their awareness about their values, emotional strategies and goals at work.

### Originality/Value

The inclusion of individual values in the relation between job demands and job resources to predict burnout and work engagement in the teachers.

## **A daily diary study of emotion regulation strategies used by teachers**

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### Purpose

Emotion regulation involves the awareness of emotions, accepting emotions, the ability to control compulsive behaviors and the use of appropriate emotion regulation strategies. It is essential for teachers, to find out which strategies are most successful to control compulsive behaviors in the context of negative events.

### Design/Methodology

Different emotion regulation strategies, namely rumination, acceptance, behavior modulation, experiential modulation, cognitive

change and reappraisal and their influence on positive and negative affect have been assessed in a daily diary study of 10 workdays with a sample of N=36 teachers.

### Results

Emotion regulation strategies have a moderating effect on the relationship between positive and negative affect in the morning and affect in the evening. Using experiential modulation strategy to deal with initial negative affect leads to significantly less negative affect in the evening. Moreover, the use of experiential modulation leads to significantly more positive affect later in the day after experiencing negative affect earlier on. Experiential modulation can be understood as “ignoring” negative emotions. Results for the opposite strategy, namely rumination, support the above findings. Using rumination as emotion regulation strategy after experiencing negative affect leads to significantly lower levels of daily task performance.

### Limitations

The research was conducted with only a small sample size of N=36 teachers. To report more general results, a larger sample is needed.

### Research/Practical Implications

Recommendations for appropriate emotion regulation strategies for teachers can be made.

### Originality/Value

This study extends the knowledge about workplace functioning and emotion regulation by taking in a teachers' perspective on a daily basis.

### **On the impact of the current affective state on reading emotions in facial expressions of others – an experimental study**

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#### **Purpose**

Reading people's emotions in their faces is an essential ability service staff members should have. Service employees must be capable of quickly distinguishing angry customers from happy ones in order to react appropriately to the current situation. However, this ability might be influenced by how service employees themselves feel at the very moment. Previous studies showed that cognition and perception are determined substantially by emotions.

In accordance with Bless, Böhner, Schwarz and Strack (1990), we hypothesize that service employees who are in a negative affective state are more sensitive towards customers' facial expressions whereas service employees who are in a positive affective state should be less sensitive towards others' facial expressions.

#### **Design/Methodology**

We conducted an experimental study with fifty service employees who deal with customers on a regular basis. The affective states of test persons belonging to the experimental group were manipulated by using pictures inducing negative or positive affect, whereas members of the control group were shown neutral images. Subsequently, photos of faces showing various emotional expressions were presented which the test persons had to classify.

#### **Results**

Preliminary results of an ANOVA support our hypotheses.

#### **Limitations**

Since the findings are based on a laboratory study, external validity is restricted.

#### **Research/Practical Implications**

The results may be useful in the context of training service employees to be better in controlling and regulating their own emotions.

#### **Originality/Value**

Previous work mostly concentrated on customers' emotions. However, the emotional state of service employees is another important component in understanding service encounters, especially with respect to non-verbal communication.

### **New methodologies for assessing “emotion perception” as a component of emotional intelligence**

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#### **Purpose**

The main purpose of this study is to demonstrate the suitability of using an “alternative” method based on mobile devices for assessing the first branch of Emotional Intelligence (EI) that is, emotional perception.

#### **Design/Methodology**

The sample included 1,517 individuals (738 male, 779 female) from 6 different countries (Spain, United States, Germany, Romania, Colombia, and Italy) that filled in the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT 2.0), and one original emotion perception subscale developed to be used by mobile devices.

#### **Results**

Results of the reliability and correlation analyses showed acceptable values of reliability for the newly developed scale and better cor-

relations compared with the “classical” emotion perception scale used by MSCEIT.

#### Limitations

More statistical analyses should be carried out in order to test the validity of this new methodology for assessing Emotional Intelligence.

#### Research/Practical Implications

Classical methodologies such as questionnaires and ability-tests have shown several weaknesses that can be undertaken using mobile devices. For instance time-control.

#### Originality/Value

This is actually the first empirical approach to the use of mobile devices for assessing Emotional Intelligence.

### **Sex differences in emotional intelligence: preliminary results from an integrative meta-analysis and implications for organizations**

#### ***Nominated for the EAWOP Congress 2013 Best Poster Award***

*Leire Gartzia (Deusto Business School, Univ. of Deusto, ES) [leire.gartzia@deusto.es](mailto:leire.gartzia@deusto.es), Zoe Zhang Fengqing (Northwestern Univ., Illinois, US), John Stratton (Northwestern Univ., Illinois, US)*

#### Purpose

Research and practice in emotional intelligence (EI) has become a fundamental area of organizational psychology. However, EI is deeply gendered, with meta-analyses showing that women are more emotionally intelligent than men (Joseph & Newman, 2010). The current meta-analysis aims to challenge this view and to provide preliminary evidence that women’s scores are higher only in relation to stereotypically feminine EI subdimensions.

#### Design/Methodology

PsychInfo searches were performed using combinations of the following keywords: gender, sex, female, male, women, men, and EI. These searches produced a total of 502 arti-

cles, and 28 studies met inclusion/exclusion criteria. Comprehensive Meta-Analysis 2.0 utilizing both fixed and random effect models was used to perform the analyses.

#### Results

In line with previous meta-analytical findings, women showed higher scores than men in overall EI. However, when looking at specific dimensions, sex differences favoring men also emerged in stereotypically masculine EI dimensions (i.e., emotion management). Women’s scores were higher in stereotypically feminine EI dimensions (i.e., emotion perception, emotion understanding and social management).

#### Limitations

Analyses were conducted with a small amount of studies. It remains to be evaluated whether hypotheses replicate with a bigger sample.

#### Research/Practical Implications

Consistent with social role theories, results provide evidence that women’s EI scores are higher only in relation to stereotypically feminine dimensions. These findings have relevant implications for work and organizational psychology research.

#### Originality/Value

This preliminary work challenges the idea that women are more emotionally intelligent than men and suggests that the existence of sex differences in EI should be examined only in relation to specific EI subdimensions.

### **Bullying at work in India: The relevance of hierarchy and relationships**

*Premilla D'Cruz (Indian Institute of Management Ahmedabad, IN) [pdacruz@iimahd.ernet.in](mailto:pdacruz@iimahd.ernet.in), Charlotte Rayner (Portsmouth Business School, UK)*

#### Purpose

The influence of sociocultural dynamics on workplace bullying has not been explored. Yet sociocultural factors cannot be ignored in a

country like India where the concomitance of individualism-collectivism, humanism-hierarchical/identity-based/personalized relationships, and spiritualism-materialism simultaneously triggers yet stymies workplace bullying.

#### Design/Methodology

A multi-city survey of 1036 employees and managers in India's offshoring-outsourcing sector using the Work Harassment Scale and including questions on sociodemographics and sources of bullying was conducted.

#### Results

While 42.3% of the respondents can be considered bullied using 'often' and 'very often' as the closest equivalents of weekly experiences, superiors (73.1%), peers (37.3%) and subordinates (21.8%) were the most frequent sources of bullying. Subordinates (94%) and peers (74%) bullied along with managers, with factor analysis revealing that where only managers bullied ( $n=253$ ), task-related bullying pre-dominated (56% variance) while where managers and subordinates/peers jointly bullied ( $n=206$ ), person-related bullying pre-dominated (58% variance). Hierarchy and relationships within the organization determine bully behaviour.

#### Limitations

Self-reported, cross-sectional data pose constraints.

#### Research/Practical Implications

That the incidence of bullying is high in India's new economy offshoring-outsourcing sector which is strongly influenced by Western industrialism raises questions about not just managerial practices and organizational context here but also the extent of the problem in traditional old economy sectors.

#### Originality/Value

Apart from being the first survey of workplace bullying in India, the study underscores the

importance of and advocates research on the role of sociocultural dynamics in workplace bullying and proposes the term 'cross-level co-bullying' to describe the concomitance of manager and subordinate/peer bullying.

### **The role of age and relationship length in the affective crossover within dual-earner couples**

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#### Purpose

This study investigates the role of age in the daily affective crossover (i.e., interindividual transfer of affective states) within dual-earner couples.

We propose a positive relationship between the positive (negative) state affect of one partner after work with the positive (negative) state affect of the other partner at night. Furthermore, referring to Carstensen's Socioemotional Selectivity Theory, we assume age to moderate this crossover of state affect. More precisely, we hypothesize higher age of the "receiving" partner to buffer the negative and to increase the positive affective crossover.

#### Design/Methodology

We collected data from 83 dual-earner couples (i.e., 166 individuals) on 316 days using online questionnaires at two days in the course of one workweek.

#### Results

Multilevel analyses revealed a significant negative main effect of the partner's age on his/her negative state affect at night, but no overall crossover of affect. Our analyses showed the proposed moderation effect of age on negative, but not on positive affective crossover.



### Limitations

Relationship length might, alternatively, explain our findings because age and relationship length are highly correlated. Actually, additional analyses using relationship length as moderator showed a similar pattern of findings.

### Research/Practical Implications

We will present an approach how to contrast age with relationship length in their unique role in the crossover process using analyses based on residuals.

### Originality/Value

To our knowledge, this is the first study to investigate the role of age in the affective crossover within dual-earner couples and to contrast it with relationship length.

## Threats of self-esteem in the service sector

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### Purpose

Coworkers in the service sector are more or less confronted with problematic customer behavior in their daily work. While past investigations discuss usually the behavior of the customers as potential stressor (e. g. Ben-Zur & Yagil, 2005; Grandy, Dickter & Sin, 2004; Dormann & Zapf, 2004; Walsh & Clarke, 2003; Bailey & McCollough, 2000), the available study focused on the employees experiences of stress, especially in case of self-esteem threats.

### Design/Methodology

Qualitatives Design: Grounded Theory Methodology

### Results

The qualitative study design made it possible to identify basis of threats to self-esteem, strategies of regularization and resources of

self-esteem as well as factors of influence from the organizational and social setting.

### Research/Practical Implications

There are an increasing number of attacks on coworkers in the service sector. These attacks aren't only an individual problem. Organizations often raise high customer expectation, which can not be satisfied by the customers in a lot of times. So organizations are partly responsible for the conflict situations with customers. After threats of self-esteems organization can furthermore support their coworkers by implementation of several coping structures like extraordinary breaks, colleague coaching and a self-esteem enhancing leadership.

## Development and validation of a taxonomy of micro-daily events at work

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### Purpose

Affective events theory highlights the importance of affective events at work as antecedents of emotional experiences, work related behaviours and attitudes. However, a comprehensive picture on the kind of events that occur frequently in the workplace and a universally valid approach regarding the assessment of work events is lacking. So, the aim of this study was to develop a comprehensive taxonomy of affective events.

### Design/Methodology

We conducted semi-structured interviews. Participants described events at work that had caused them to experience specific emotions. All answers were sorted into general categories according to their thematic similarity. We identified seven general categories of negative job-related events: threat to self-image; refusals; operational hassles; interpersonal in-

teraction; organizational hassles; task hassles, and; other hassles. We identified six general categories of positive job-related micro-events: interpersonal interaction; receiving recognition; achievement; other uplifts; helpfulness, and; task uplifts.

#### Results

Overall, 229 daily events were reported. The largest overall positive event category was "interpersonal interaction" (29%). Within this category, the most frequent event was "having a good time and laughing" (31%). The most frequent negative category was "operational hassles" (27%), with items like "having a poor performance on a task" (12%).

#### Limitations

For convenience purposes all participants worked in the same large activity sector (services).

#### Research/Practical Implications

This study complements previous research by providing a comprehensive yet parsimonious classification of both positive and negative affective events.

### **The study of teachers' professional burnout in geopathogenic zones**

*Svetlana Ishbuldinovna Galyautdinova (Bashkir State Univ. of Ufa, RU) [lanagal@bk.ru](mailto:lanagal@bk.ru)*

#### Purpose

The aim of the study is to compare the professional burnout of the teachers working in the geopathogenic zone and of those working in the favourable zone. The research objectives comprise the geopathogenic zones definition and the professional burnout psychological diagnosis.

#### Design/Methodology

The subjects sampling included a group of teachers who have been working in the geopathogenic zone for 10 to 25 years and a group of teachers working in the favourable

zone for 10 to 25 years. Emotional exhaustion and self-esteem of professional qualities were selected as professional burnout indicators. We used Boyko Method and Budassi Method. The geopathogenic zones were determined with the device - geologic anomalies indicator.

#### Results

The research results showed that high level of emotional exhaustion occurs in the teachers working in the geopathogenic zones for 13-15 years. Meanwhile, for the teachers in the favourable zone, the tendency of this indicator appears only by 20-year work experience and later. Low self-esteem of professional qualities is twice more common in the teachers with over 20-year work experience in comparison with those having the same work experience in the favourable zone.

#### Limitations

This study is limited by the small sample size and by the investigation of only two professional burnout indicators.

#### Research/Practical Implications

The study data can be used for searching ways to neutralise the impact of negative environmental factors on the human psyche in labour process.

#### Originality/Value

The value of this research is that the geopathogenic zones impact on teachers' professional burnout is examined for the first time.

### **A multi-level analysis of the moderating role of supportive team climate in the emotion work- emotional exhaustion relationship**

#### ***Nominated for the EAWOP Congress 2013 Best Poster Award***

*Esther García Buades (Univ. of Balearic Islands, ES) [esther.garcia@uib.es](mailto:esther.garcia@uib.es), Silvia Ortiz Bonnín (Univ. of Balearic Islands, ES), Amparo Caballer Hernández (Univ. of Valencia, ES), Dieter Zapf (Goethe-Univ. Frankfurt, DE)*

### Purpose

Emotion work or the requirement to display certain emotions during service interactions may produce burnout when these emotions are not truly felt - emotional dissonance- (Tschan, Rochat & Zapf, 2005). Previous studies have considered how resources (i.e. social support) may buffer against negative effects of emotion work (Zapf, 2002), however there is scarce empirical research considering social support at the team level. Building on the support-buffering model we hypothesized that work-unit supportive climate should provide emotional resources to employees to protect them against strain from emotion work.

### Design/Methodology

The sample consisted of 317 front-line employees (receptionists and waiters) nested in 99 work-units at large Spanish hotels and restaurants. Multilevel analyses of direct effects, mediation and moderation were conducted with HLM7.

### Results

As predicted, work-unit supportive climate provides emotional resources which (1) reduce both experienced emotional dissonance and emotional exhaustion and (2) moderates the impact of emotional dissonance on emotional exhaustion.

### Limitations

It remains to be tested how much these results generalize to other occupations and how support from others besides co-workers (i.e. supervisors) affects the relationship between emotion work and burnout.

### Research/Practical Implications

These results provide empirical evidence of the important role that group supportive climate plays in protecting frontline employees from negative effects of emotion work. Regarding practical implications for managers, we recommend they promote collaborative

relationships between workgroup individuals to better cope with emotional job demands.

### Originality/Value

To our knowledge, this is the first empirical research considering team level forms of social support as a buffer between emotion work and wellbeing.



# 18. Research and methodology

## Invited Symposia

### We Need More Time ... Conceptual and Methodological Innovations in W&O Psychology

Session Chair: *Robert A. Roe (Maastricht Univ.)*  
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#### State of the art

The interest in time and temporal research in W&O psychology is rising, and digital technologies are making it easier to gather and analyse time series data. However, our concepts and theories are lagging behind. Rooting in the differential paradigm, just like most of our methodological equipment, they are ill-suited to extract and represent dynamic aspects of behavioural phenomena.

#### New perspective

The difficulties that emerge when one starts studying behavioural dynamics can be overcome by changing perspective and looking for concepts and methods based in the temporal rather than the differential paradigm. This symposium is devoted to recent innovations in W&O psychology. It shows how researchers have tackled critical issues in temporal research by developing new concepts and new methods.

#### Research Implications

The contributions to this symposium pertain to a number of specific topics, but they have been selected because of their potential to inspire researchers in other subject areas.

## *Presentations of the Symposium*

### Unveiling the biography of people and organizations

*Robert A. Roe (Maastricht Univ.)*  
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#### State of the Art

Within a temporal perspective, all behavioural phenomena are subject to change and stability is a special form of change. This implies that when studying people in organizational settings there are a history, a present and a future at any present point in time. This presentation focuses on history and argues that its representation in human memory as well as in institutional structures is likely to make people's current and future behaviours dependent on the path-dependent history of workers, teams, jobs, practices, structures and so on.

#### New Perspectives/Contributions

The paper proposes that the notion of variable (which refers to between-subject variation) should be replaced by the notion of phenomenon (which refers to within-subject variation over time), and that a new concept should be introduced, i.e. that of biography, to capture the part of phenomena that lie in the past. It examines how the biography of workers, teams, jobs, practices, structures etc. can be defined and operationalized and how it can be used in temporal research.

#### Practical Implications/Originality/Value

Adding biographical measures to the current measures used in traditional research has far-reaching implications for research studies in W&O psychology. It also opens new perspectives on practical applications, as is illustrated with examples from the fields of selection, job design, leadership and organizational change.

## **The benefits of turbulent times: A sequence-analytic approach to experience-sampled workplace creativity**

Bertolt Meyer (Univ. of Zurich) [b.meyer@psychologie.uzh.ch](mailto:b.meyer@psychologie.uzh.ch), Sandra Ohly (Univ. of Kassel)

### **Purpose**

We apply novel sequence-analytic methods to experience sampling data in the analysis and prediction of workplace creativity. Specifically, we investigate whether regularities in temporal sequences of employees' experiences determine the frequency of creativity. Based on this example, we show how sequence analysis can go beyond traditional regression-based approaches and answer novel research questions.

### **Design/Methodology**

We analyzed a published data set of experience-sampling data ( $t = 20$ ) from 149 employees containing measures of affect, challenge, threat, and creativity. We converted the data into state sequence objects and analyzed it with the trajectory miner package in R. We aimed to replicate the results of prior regression analyses with transition probabilities, and conducted a sequence cluster analysis followed by a comparison of clusters with regard to sequence entropy and turbulence.

### **Results**

Individuals showing more creativity were those whose state sequences were marked by high levels of entropy and turbulence. In other words, employees who reported many different experiences in unpredictable patterns also reported the highest frequency of creativity.

### **Limitations**

The analysis is somewhat explorative. Further applications of this technique need to confirm the validity of its outcomes.

### **Research/Practical Implications**

Complex temporal patterns can be predictive for work-relevant outcomes and new time-based techniques can help to uncover them.

### **Originality/Value**

Sequence analysis can be used to analyze temporal data in novel ways that allow the testing of research questions that traditional variance-based approaches cannot answer.

## **Intra- and inter-team longitudinal approaches combined: Inferential pitfalls to avoid and theoretical frontiers to explore**

Jia Li (Univ. of Goettingen) [jia.li@psych.uni-goettingen.de](mailto:jia.li@psych.uni-goettingen.de)

### **State of the Art**

Despite flourishing longitudinal research in teams, a conspicuous discrepancy continues to exist between theoretical inquiries and analytical methods (Roe, Gockel, & Meyer, 2012). To bridge this gap, Li and Roe (2012) proposed an analysis that examines inter-team differences in intra-team changes over time, which differs in logic and scope from conventional inter-team longitudinal approaches.

### **New Perspectives/Contributions**

This paper compares and contrasts results from these approaches in two empirical studies. It shows how inferential pitfalls can be avoided and theoretical frontiers explored by using these approaches complementarily.

### **Research/Practical Implications**

In a study with 33 emergency management teams participating in hour-long training exercises, results from the inter-team approach show that members' increasingly similar understanding of the team task situation in an early phase benefits team performance in the end. In contrast, results from the intra-team approach show that both teams with increasingly similar and increasingly dissimilar understanding of their task perform better than



teams with a stable understanding of their task.

In a case study with six anaesthesia teams over three performance episodes, the intra-team approach reveals an association between continuously increasing team performance with decreasing explicit and increasing implicit coordination. This stands in opposition to team coordination theory based on cross-sectional research, which posits that in complex tasks high team performance is associated with high explicit coordination but low implicit coordination.

#### Originality/Value

This paper calls for examining teams' qualitative differences in change trajectories ex ante and for developing both "differential" and "temporal" theories that generate complementary knowledge.

### **Trajectories of shared leadership – and not absolute levels – relate to team performance**

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 (Chemnitz Univ. of Technology)

#### Purpose

Shared leadership occurs when leadership influence is distributed among team members and predicts team performance (e.g., Carson, Tesluk, & Marrone, 2007). We examined how shared leadership develops from the beginning until the end of a team project and how different trajectories of shared leadership relate to team performance.

#### Design/Methodology

Fifty-six self-managed student research teams completed a research project during five months. Shared leadership was operationalized as network density (Gockel & Werth, 2010) and assessed at the beginning, mid-point, and end of the project. Team perfor-

mance was assessed by instructor ratings. We used the intra-team longitudinal approach (Li & Roe, 2012) to analyze the data, grouped trajectories of network density into four patterns (increase, decrease, inverted-u shape, u-shape), and used these patterns as predictor in the analyses.

#### Results

Teams whose network density increased or showed a u-shaped pattern performed better than teams with other patterns. Absolute levels of density were not related to team performance.

#### Limitations

Due to the nature of the data, we cannot say which specific leadership behaviors help to increase team performance.

#### Research/Practical Implications

Results show that an increase in shared leadership in the second half of a team project is related to better performance. Future research needs to replicate this finding with more measurement points.

#### Originality/Value

We show the application and value of a bottom-up approach to examining team trajectories. Our results indicate that it might be more important for leadership researchers and practitioners to focus on changes instead of absolute levels of shared leadership.

### **Winning hearts and minds: The dynamic interplay of commitment processes**

*Omar Solinger (Free Univ. Amsterdam)*  
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#### Purpose

Research on dual attitude theory shows that attitudes are highly dynamic and that emotive ('heart') and reflective-propositional (e.g., 'mind') systems are separable mental faculties. Using a trichotomous process model of

work attitudes, we predict that affective, cognitive and behavioral processes are dynamically interrelated but yet follow different temporal patterns. We also predict that commitment change is affect-driven during organizational entry and cognition-driven during organizational exit.

#### Design/Methodology

We test these hypotheses with high-frequency longitudinal commitment data from 74 PhD graduates entering new organizations and 23 candidates leaving their alma mater, spanning half a year.

#### Results

Dynamic principle component analysis showed a common dynamic component in our trichotomous processes. Affective process followed a distinct trajectory. In random slope comparisons we found affect to be more inert than cognitive and behavioral processes (i.e., slower to warm up and cool down during entry and exit). We obtained marginally significant evidence for the hypothesis that during organizational entry commitment change is affect-driven, whereas during organizational exit it is cognition-driven.

#### Research Implications

Results suggest that 'affective commitment' is not permanent but limited to transition periods in which the 'heart' leads the 'mind' temporally.

#### Limitations

The trichotomous process model and the dual-attitude structure view are not fully compatible. Yet, combining these research lenses can fill gaps in our understanding of attitude dynamics.

#### Originality/Value

To our knowledge, this study is the first to systematically translate constructs to the temporal domain. This leads to a new understanding of what constitutes commitment.

### Position Papers

## When do Outcomes Come Out? Improving Conceptualization and Modeling in W&O Research

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#### State of the Art

The research literature of W&O psychology offers numerous cases of problem-method discrepancies, which stem from flawed conceptualization and modeling practices. Among them are the use of mediator and moderator analysis for drawing causal inferences from differential data, the use of inter-individual associations for predict intra-individual change, and the use of inferential statistics for generalizing to unknown ('phantom') populations. These examples show that researchers may not be sufficiently aware of the logical traps that threaten the logical chain of argumentation in their work, and can harm the validity of their conclusions and the utility of their proposed interventions. This should be reason for concern among W&O psychologists, since methodological deficiencies hamper theoretical advance in their field and undermine its status as an applied science.

#### New Perspective/Contribution

The aim of this position paper is to show that critical judgment can help researchers identify potential problems and to develop more robust designs. Research using the notion of 'outcomes' is chosen to demonstrate this. Critical conceptual analysis reveals that outcomes are typically conceived in a static way and are hence measured at a single, seemingly arbitrary point in time. However, outcomes are also supposed to be produced by a psychological process, which is dynamic by nature.

This poses a contradiction: something that flows cannot result in something that stands still at all times, a dynamic phenomenon cannot result in a static outcome. If an outcome comes out, it must do so at a particular point in time, which means that it did not exist before and therefore must be dynamic as well. It appears that W&O researchers rarely think of outcomes in this absolute sense. What they call outcomes may be assumed to exist while the process is going on, or even before it starts. For instance, outcomes such as engagement, commitment, satisfaction, organizational citizenship behavior or performance, could be observed while the processes from which they are supposed to follow – e.g. identification, work-family conflict, member leader exchange, team conflict, or organizational change – are unfolding. In this case, the assumption that they are influenced by the process implies that they cannot be static. Regardless of whether outcomes emerge after the process ends or at an earlier moment, they must be conceived as dynamic – which means that they must be defined with reference to time and measured at multiple moments, just like processes.

A review of the designs and analytical methods used by process-outcome researchers shows that the conceptual inconsistencies are hardly ever perceived. One reason for this is that, like the outcomes, the processes – in spite of their dynamic nature – are typically operationalized in a static manner. A second reason is that research designs are typically geared to the analysis of between-subjects covariation of process and outcome measures, and not to within subjects co-variation (over time). This is even so in longitudinal studies with two, three or more waves of measurement, where the focus is on individual differences at T1, T2 etc. and their association with differences in outcomes observed at Tm. Very few studies explicitly focus on within-subjects variation (i.e. change trajectories) and study

process-outcome covariation over time. Mixed designs, combining between- and within-subjects covariation are even more rare. The methods of analysis are predominantly based on the general linear model (i.e., regression analysis and analysis of variance; sometimes linear growth modeling). The analytic methods thus fit the design, but the fact that they are unsuited to study the problem “how a process leads to certain outcomes” remains unnoticed. The consequences of this approach often embarrassingly show in the discussion or conclusion section of research papers, when authors attribute outcomes to processes without noticing the conceptual inconsistency and the inadequacy of the methods.

The type of problems discussed here can be avoided by using ‘minimal sentences’ and ‘extended modeling’. The minimal sentence is a simple linguistic tool for revealing the critical properties of concepts by embedding them in a sentence comprising the necessary elements. Typical elements such as subject, verb, object, and attribute help to make clear “what happens to whom in which respect at what moment”, which leads to sharper conceptualizations. Extended modeling is a graphical technique that replaces the commonly used boxes-and-arrows by (leveled) elements that can be given multiple dimensions and connectors. It allows drawing up models that better map the research problem.

A short video of people at work will be used to visualize the process-outcome problem and the way in which the proposed method can help alleviating it.

#### Conclusion and Implications for Research/Practice

It is concluded that W&O research is in need of greater sophistication in conceptualization and modeling. Critical judgment, supported by the proposed tools of ‘minimal sentence’ and ‘extended modeling’, can help generating

more adequate problem statements and choosing well-fitting designs and analytical methods. This reduces the risk that published knowledge claims will afterwards be discarded because of methodological inadequacy and that evidence-based interventions will appear to be ineffective since they are based on flawed evidence.

### **Extending the Staff Ride for Qualitative Research in Organizational Psychology**

*Becker, Wendy S. (Shippensburg University, USA), [wsbecker@ship.edu](mailto:wsbecker@ship.edu), Burke, Michael J. (Tulane University, USA)*

Although present throughout military history, the staff ride has not been previously examined for application to qualitative research in organizational psychology (Becker & Burke, 2012). Research staff rides recreate historical events for the purpose of understanding organizational phenomena through observation, reflection and discussion. Retrospective analysis of historical data allows the generation of rich phenomena for investigation of situated action. Staff rides extend retrospective analysis by gathering together knowledgeable content experts at original or recreated sites to concurrently and publicly reflect upon behavior and context. Exemplars demonstrate this innovative, interactive approach to qualitative research investigation.

#### **New Perspective/Contribution**

Unique contributions include the independent analysis of events by content experts who collectively and concurrently reflect upon retrospective data while experiencing context. Reconstructing events builds on first-person accounts and archival data, allowing new interpretation. Significantly, new findings emerge through the process of open reflection and dialogue despite confusing or conflicting data. Given that staff rides examine ordered sequences of contextually-bound events, an important benefit is the develop-

ment of participant understanding of the dependence between past and future observations.

Grounded in experiential and dialogical learning, the staff ride method promotes reflection, making it ideal for engaging researchers at original or recreated work contexts. This is increasingly important as methods with a high degree of fidelity to the work environment have been shown to have relatively large effects with respect to knowledge acquisition and work performance (e.g., see Burke et al., 2011; Taylor, Rus-Eft, & Chan 2005). The availability of electronic historical databases encourages innovative use of organizational records. Staff rides provide a response to calls in the literature for greater attention to dangerous *in extremis* ("at the point of death") work settings while recognizing that research such access may be difficult (Bamberger & Pratt, 2010; Kolditz & Brazil, 2005; Siggelkow, 2007).

Originally developed as a tool for military leaders, historic staff rides were championed by Helmuth von Moltke, chief of staff of the Prussian Army from 1857-1888 (Bucholz, 2001). Believing that elaborately conceived plans would fail when soldiers came into direct contact with the enemy, Moltke used battle sites as a "tool to forearm staff officers against the many possible contingencies" (Hall, 2005, p. 41). Today military staff rides are sophisticated simulated events using cell phones, digital videos, satellite-imaging, and electronic mapping. Wildfire, park service and other agencies have adapted the staff ride method. Maclean's retrospective analysis of the Mann Gulch smokejumper accident in Montana demonstrates the value of independent review of an event outside of the organization in which an event occurred:

The Forest Service moved quickly, probably too quickly, to make its official report and get its story of the fire to the public...In four days they assembled all the relevant facts, reviewed *them*, passed judgment on *them*, and wrote what they hoped was a closed book on the biggest tragedy the Smokejumpers had ever had (Maclean, 1992, p. 148).

Both Weick (1993) and Whiteman and Cooper (2011) exemplify the use of retrospective analysis of Maclean's original data.

#### Conclusion and Implications for Research/Practice

Our discussion emphasizes the value that the staff ride brings to stimulating dialogue and public reflection among researchers concerning critical incidents associated with a historical event to move toward greater understanding of organizational phenomena. New findings emerge through the open reflection and dialogue of content experts despite previously confusing or conflicting data. In proposing the staff ride, we call upon researchers to take up Maclean's challenge to discover the missing parts of research:

*The story, then, is the quest to find the full story of the Mann Gulch fire, to find what of it was once known and was then scattered and buried, to discover the parts so far missing because fire science had not been able to explain the behavior of the blowup or the 'escape fire,' and to imagine the last moments (Maclean, 1992, p. 156).*

Given its potential to promote understanding of organizational phenomena through social reflection in natural and recreated settings, we encourage the staff ride for qualitative research in organizational psychology.

## Single Papers

### A multiple analysis methods approach to personality measurement

Richard C Thompson (CPP, Inc., US) [rthompson@cpp.com](mailto:rthompson@cpp.com), Michael Morris (CPP, Inc., US)

#### Purpose

This paper discusses a methodology that informs the emic and etic debate in personality psychology. The study used a culturally sensitive approach developing item content, and multiple analysis techniques to evaluate the data for cross cultural differences.

#### Design/Methodology

A 230 item research form of the MBTI® instrument was administered to over 17,000 people in 22 countries using 17 different languages. The data was examined using Latent Class Analysis, Item Response Theory, and Classical Test Theory to identify items that best measured MBTI type preferences across cultures.

#### Results

Results showed that using multiple analysis techniques provides significant insight in the functioning of personality items compared to any single analysis approach. In addition, the analyses showed that the three techniques converged to identify the best items in the pool, and that the best items tended to work across cultures.

#### Limitations

The main limitation of this study is that it tends to focus more on European countries and does not include a large number of Asian countries.

#### Research/Practical Implications

This study shows an approach to developing cross cultural personality instruments. It also shows the value in looking at the data from multiple perspectives, as well as recognizing

practical limitations when doing large scale research around the globe.

#### Originality/Value

The value of this study is in the comparison of the different analysis techniques when comparing cross cultural data. It provides insight on the emic and etic debate in personality measurement, suggesting an approach that allow for both perspectives to be evaluated.

### Normative, ipsative, and beyond

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#### Purpose

For online personality tests, two formats are established: normative and ipsative. Normative questionnaires are pleasant to answer for test takers because they can indicate for each item to what extent they agree, but often leads to undifferentiated profiles (Murphy, Jako, & Anhalt, 1993) or socially desirable responding (Zickar & Gibby, 2006). The ipsative format yields profiles with a higher degree of differentiation (Bartram, 2006), but is not as pleasant to answer. A third format that strives to combine the advantages of the two formats will be presented: adalloc (adaptive allocation of consent).

#### Design/Methodology

Adalloc presents items in blocks and test takers have to make a choice, like the ipsative method. However, they are not required to allocate all points and they may also allocate an equal number of points to all items, like in the normative format. Up to date, over 250,000 participants have completed adalloc-based questionnaires.

#### Results

An adalloc-based questionnaire of job-related competencies, shapes, yields internal consistencies between .72 and .85 and test-retest

reliabilities between .70 and .87. Factorial analyses result in eight factors as found for such measures e.g. by Kurz and Bartram (2002).

#### Limitations

As the method is closely related to the ipsative one, it also takes over some of its limitations, for example the relative nature of the scores.

#### Research/Practical Implications

The method allows for shortening the questionnaire and makes it pleasant for participants to complete and at the same time yields highly differentiated profiles.

#### Originality/Value

Adalloc-based questionnaires are pleasant and short to complete and still yield highly differentiated profiles.

### Development of an individual work performance questionnaire

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#### Purpose

The goal of the current study was to develop a generic and short Individual Work Performance Questionnaire (IWPQ). The IWPQ was based on a four-dimensional conceptual framework, in which individual work performance consisted of task performance, contextual performance, adaptive performance, and counterproductive work behavior.

#### Design/Methodology

After pilot-testing, the 47-item IWPQ was field-tested amongst 1,181 Dutch blue, pink, and white collar workers. Factor analysis was used to examine whether the four-dimensional conceptual framework could be confirmed. Item Response Theory (Rasch



analysis) was used to examine the functioning of the items in more detail. Finally, it was examined whether generic scales could be constructed.

### Results

A generic, three-dimensional conceptual framework was identified, in which individual work performance consisted of task performance, contextual performance, and counterproductive work behavior. Generic, short scales could be constructed that fitted the Rasch model for all occupational sectors, resulting in the 14-item IWPQ.

### Limitations

Some ceiling effects were identified for the task performance and counterproductive work behavior scales. As a result, it is harder to discriminate, and detect changes, among persons with high task performance and persons with low counterproductivity.

### Research/Practical Implications

This study provides researchers with a standardized and generic way to measure individual work performance. In the future, the discriminative ability of the IWPQ will be improved by adding more difficult items. Hopefully, the IWPQ will facilitate easy and comprehensive measurement of individual work performance, increase comparability of studies, and contribute to establishing the predictors and effects of individual work performance even more accurately and completely.

### **How do you want to work, how do you want to live? Addressee and context effects threaten the validity of work-life-balance survey results**

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Many organizations implement work-life-balance programs to enhance their employees' well-being and their own employer attractiveness. This process usually includes

demand assessments concerning employees' perceived stress, attitudes and needs. Such applied surveys often ignore that self-reports may be heavily affected by social desirability and contextual priming effects.

In Exp. 1, N = 120 working adults filled in a work-life-balance survey ostensibly conducted in cooperation with a fitness center vs. a consulting group. Half the subjects in each addressee condition were assessed under bogus pipeline conditions. As a third, explorative factor participants were recruited on Tuesdays vs. Saturdays, respectively. As expected, self-reported career-orientation was significantly higher in the consulting group than in the fitness center condition. This addressee effect was substantially diminished when participants believed that "lies" would be detected. Moreover, participants presented themselves as more career-oriented on Tuesdays as compared to Saturdays.

In Exp. 2 (N = 60), we experimentally manipulated the environmental context in which a questionnaire on career-orientation was filled in (on campus vs. in a café), and participants reported stronger career-orientation on campus. Study 3 replicates this finding with a sample of N = 80 working parents filling in a work-family-balance questionnaire at their office vs. at home. The environmental context bias also disappeared under bogus-pipeline conditions and thus seems open to conscious control.

In sum, findings indicate that addressee and temporal-spatial context effects affect responses in work-life-balance surveys, casting serious doubt on their validity. The applicability of alternatives, such as diary or day reconstruction methods, observation, and implicit measures is discussed.

## Posters

### **Occupational expectancies and employability perceptions in undergraduates: a mixing method study**

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#### Purpose

Employability has been defined as “the capability to gain initial employment, maintain employment and obtain new employment if required” (Hillage & Pollard, 1998), or as “a form of work specific active adaptability that enables workers to identify and realize career opportunities” (Fugate, Kiniki and Ashford, 2004, p. 16). Rothwell, Herbert and Rothwell (2008) defined students' self perceived employability as “the perceived ability to attain sustainable employment appropriate to one's qualification level” (p. 2). based on this latter definition, the present study aimed at investigating students' self-perceived employability by using both qualitative and quantitative methods (Fielding & Fielding, 1986).

#### Design/Methodology

In the first study, 3 focus group discussion aimed at exploring student's perceptions about employability were conducted with 23 senior-year students. Further, in study 2, a self-report questionnaire measuring the three scales “students' self-perceived employability, ambition and university commitment” (Rothwell et al. 2008) adapted into Italian

(backtranslation method, Brislin, 1970) was administered to a sample of 200 senior-year students.

#### Results

Results shows that female students are more worried about their future work rather than male students, who say that if they could not

find the right employment they will “adapt” to whatever job.

#### Limitations

This study have some limits: (a) the convenience sample made up of psychology students; (b) self-report measures have been used principally; (c) it is a cross- sectional study.

#### Originality/Value

Using a triangulation of methods to explore phenomena like employability perceptions gives us the possibility to catch much more nuances rather than a single method.

### **Observer effects in the absence of demand characteristics: The curious case of video monitoring of task performance**

#### ***Nominated for the EAWOP Congress 2013 Best Poster Award***

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#### Purpose

The usual explanation for observer effects in research on organizational behavior is that researchers' cognitive biases cause them to unconsciously influence participants in a manner consistent with hypotheses. In many cases, the observer effects likely depend on the expectations of the observers and the social cues that communicate these expectations to those being observed. A neglected question, however, is: What is the effect of electronic monitoring on performance in the absence of expectations and social cues? Can monitoring in itself influence behavior and, if so, how?

#### Design/Methodology

Observation of performance quantity on a hand-eye coordination task was conducted via video monitoring. In Experiment 1, no hypotheses were developed and a double-blind procedure was used. In Experiment 2, we used

the same design as in Experiment 1 and controlled for cognitive ability and emotions.

#### Results

In Experiment 1, results demonstrated that monitored participants' performance was lower than that of non-monitored participants. These findings were replicated in Experiment 2, controlling for cognitive ability and emotions.

#### Limitations

Additional research is needed in order to investigate whether our results generalize to tasks that differ in important ways from the one we used.

#### Research/Practical Implications

The questions raised in this research are important because they pertain to the baseline consequence of monitoring. Without knowledge of the results of observation, researchers would be in danger of misinterpreting effect sizes and overlooking the role of observation in their theories and data.

#### Originality/Value

Our studies contribute to knowledge of observation effects by demonstrating that such effects can occur in the absence of expectations and social cues.

### **Validation of a German version of the ethical leadership at work questionnaire (ELW) by Kalshoven et. al (2011)**

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#### Purpose

In 2011 Kalshoven and colleagues introduced a new measure of ethical leadership, the ELW, which aims at multi-dimensionally covering the full range of ethical leader behaviors. As so far only a two-dimensional German meas-

ure exists (Ethical Leadership Scale, ELS-D), we intended to translate and validate the ELW.

#### Design/Methodology

After translating and back-translating items, data was collected in online surveys. Confirmatory factor analyses were based on the total sample of N = 363 employees. To investigate convergent and discriminant validity we compared correlated correlation coefficients of various leadership measures in a sample of N = 133. Examinations of criterion related validity relied on N = 99 employees.

#### Results

Compared to models with fewer factors, the assumed seven-factor structure best fits the ELW-D. A model with an overarching ethical leadership factor also showed an acceptable fit. Further confirming construct validity, the ELW-D highly correlated with related leadership measures, and these correlations significantly exceeded those with construct-unrelated measures. However, the ELW-D did not correlate more highly with the ELS-D than with other convergent constructs. With positive work attitudes and performance measures the ELW-D displays significant concurrent relations and incrementally explains variance in these criteria above the ELS-D.

#### Limitations

Findings rely on self-reported, cross-sectional data and need to be replicated in longitudinal and multi-source studies.

#### Research/Practical Implications

This multi-dimensional instrument is of special interest when considering specific antecedents, consequences and mediators of ethical leadership.

#### Originality/Value

The validation study extends the measurement of ethical leadership within the German-speaking area to a multi-faceted instrument.

### **Approach and avoidance temperament: An examination of its factorial, construct, and predictive validity at work**

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#### **Purpose**

In three field studies, we investigated the factorial structure, construct, and predictive validity of two basic dimensions of personality, suggested as an integrative framework for the structure of personality (Elliot & Thrash, 2010): approach and avoidance temperament.

#### **Design/Methodology**

Participants in Study 1 were 433 university students. Furthermore, we collected data in two samples of employees from different organizations (Study 2: N=103; Study 3: N=93). In Study 3, we investigated the relation between self-report data of employees and peer ratings of job performance.

#### **Results**

We found that a Dutch translation of the approach-avoidance temperament questionnaire (ATQ; Elliot & Thrash, 2010) can best be described by a two factorial structure. Furthermore, we demonstrated that the dimensions are independent of intelligence and moderately correlated with goal orientations. Furthermore, we showed that the temperament dimensions have incremental validity regarding work engagement above and beyond motivational traits, and that especially approach temperament is positively related to ratings of task, contextual, and creative job performance.

#### **Limitations**

The generalizability of our findings may be limited due to particular sample characteristics, the selection of work-related variables, and the chosen operationalizations.

#### **Research/Practical Implications**

We showed that individual differences in terms of a disposition for the orientation and reaction to (positive or negative) stimuli across situations can be used to increase the understanding of behavior at work, and our results clearly support the practical utility of a Dutch version of the ATQ for this application field.

#### **Originality/Value**

To our knowledge, our study is the first attempt to evaluate the validity of the ATQ for the work field.

### **A board game on 'new ways of work' as a tool in education**

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#### **Purpose**

Organizations are increasingly aware of the need to involve and consult employees when implementing new office concepts (De Bruyne & De Jong, 2008). Facility management students, as future managers, need to become acquainted with change processes regarding workspace. A game is a suitable learning and decision-making tool: it triggers participants' knowledge, stimulates thought, but is also fun (Brandt, 2006). For students, context for the game can be either work experience during internships, or a case study.

#### **Design/Methodology**

A board game was developed that requires players to compete for functional elements (location/building, room, ICT tool and transport) and social elements (co-workers, managers) that will optimally support their work. Players' order of choices can be analyzed to show patterns in preferences, linked to personal and work characteristics. Discussions between players can be recorded and analyzed.

### Results

The prototype was tested in five sessions. Players were facility management students, for comparison the game as also played by other students and a group of older workers. Results showed the game to an effective tool in both learning and decision-making as well as creating an awareness of decision process amongst participants. It stimulated discussion of workplace-related topics.

### Limitations

The limited number of sessions and the element of chance limit generalization of the results.

### Research/Practical implications

The game is suitable for students at graduate and undergraduate level.

### Originality/Value

The game was based on realistic premises regarding new ways of working. The board game, is a novel method in facility management education that provides a suitable tool to stimulate thought and enhance learning impact.

## **Measuring invariance of job satisfaction in six group of professionals: a cross-cultural study**

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### Purpose

The purpose of this paper is to verify a model of job satisfaction among professionals working in six different countries: Italy, France, Germany, Spain, Poland and Brazil.

### Design/Methodology

The study involved a group of 3886 professionals from a multinational industrial company employed in technical, production, sales and personnel sectors. A multiple choice questionnaire previously validated has been used

to assess four dimensions of job satisfaction: Career development and growth, Compensation, Communication, Relationship with supervisors. Confirmatory Factor Analysis was used to assess the validity of each of the six individual country datasets using different factor solutions. Multigroup analysis was performed for testing measurement invariance.

### Results

The results demonstrate the multidimensional nature of the construct and the four dimensions were mainly supported across the countries examined as the fit indices show (TLI > .95, CFI > .95, RMSEA < .06 for the Italian, Brazilian, French, German and Polish models; TLI > .90, CFI > .90, RMSEA < .06 for the Spanish one). However, results may differ upon the selection of the measurement model.

### Limitations

Further research is required in order to confirm these findings, more specifically by taking into consideration subjects of the same professional level employed in different companies.

### Research/Practical Implications

The use of the questionnaire can assist managers in the activities of human resources engagement and motivation, and for the understanding of the organizational climate.

### Originality/Value

Psychometric characteristics of the job satisfaction scale for professionals were confirmed, and the questionnaire could be applied in each of the six countries examined.

### **Spatial distance from objects representing an organization as a predictor of job performance**

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#### **Purpose**

Many researchers believe that there is an urgent need to find new and effective ways to predict job performance based on job-related, individual characteristics. The self-descriptive characteristics, however, are sometimes largely “deflected” by the need for social approval. The aim of the presented studies was to test an explanatory power of a new, indirect method of measuring attitudes towards an organization in predicting a success at work.

#### **Design/Methodology**

62 employees from a transport company and 44 bank clerks participated in two independent studies,. In each study the typical, direct measurements of organizational attitudes (e.g. organizational commitment and semantic differential) were obtained. In addition, an indirect measure of the attitude was estimated in a computer simulation as a spatial distance from objects representing an organization. The dependent variables were respectively: 1) job performance rated in 6 dimensions by managers and 2) sales results for the last quarter.

#### **Results**

Two independent studies have shown the incremental validity of the indirectly measured attitude over and above the direct measures for explaining the job performance.

#### **Limitations**

The relatively small size of surveyed employee groups was the major limitation of the two studies.

#### **Research/Practical Implications**

The indirect measure of attitude towards an organization has proved to be most effective for predicting actual job performance. These findings indicate a potential for more effective assessment and vocational counseling.

#### **Originality/Value**

The results have implications for organizational research, as they demonstrate the importance of indirect measurement of attitudes that are still rarely used in the organizational context.

### **A hierarchy of eustress and distress: Rating scaling of the Valencia eustress distress appraisal scale**

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#### **Purpose**

Rasch Rating Scale Model (RSM) methodology was used to discover the hierarchy of the items of the Valencia Eustress Distress Appraisal Scale (VEDAS; Rodríguez, Kozusznik, and Peiró, 2011) and to calibrate the items on an interval scale. RSM allows to test if the response categories set behaves properly. In addition, it provides us with the parameter estimations that are invariant (can be generalized from one sample to another), and with a table that transforms raw scores into their corresponding interval scores.

#### **Design/Methodology**

RSM was applied to the 20 VEDAS items. Sample was composed of 603 Spanish social service professionals.

#### **Results**

The results of the item calibration show a graduation of types of stressful situations that are appraised as distress and/or as eustress, which is contrasted with previous theoretical



considerations. More items are needed to cover some gaps in the stress dimensions, while some redundant items might be deleted. Respondent have difficulty in distinguishing between six response-scale categories. Combining these categories into three can eliminate this problem and increase the sensitivity in measuring eustress and distress appraisal. Differential Item Functioning (DIF) analysis shows that the VEDAS adequately meets measurement criteria of invariance.

#### Limitations

Self-report data and a convenience sample are used.

#### Research/Practical Implications

The study provides an illustration of the benefits of using Rasch methods in the field of work and organizational psychology for scale development and evaluation, which is up-to-date uncommon.

#### Originality/Value

The application of the RSM to a measure developed in work and organizational area is useful and novel.

### **Fabrication of other reports in snowball sampling: An overlooked problem in multi-source research?**

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#### Purpose

In snowball sampling, study participants are asked to recruit other participants who are harder to access (e.g., supervisors) – a common strategy in multi-source research. Researchers typically have little control over the actual identity of the participants they did not recruit themselves. Hence, a proportion of other reports may be fabricated by original recruits. The present study investigates the

prevalence, correlates, and consequences, of this potential source of bias.

#### Design/Methodology

Regularly employed undergraduates were asked to submit surveys online and also to recruit their supervisors and coworkers for additional other reports. Undergraduates received course credit in response for each report submitted. We used information on time stamps and browser versions of multi-source ratings of the same target to identify submissions suspicious of being fabricated.

#### Results

Preliminary analyses of 178 matched data sets revealed that, in 71 cases (40 %), other reports were highly suspicious of being fabricated. Compared to unsuspicious participants, persons suspicious of having fabricated other reports described themselves as less satisfied with their job and supervisors, and as showing less citizenship but more counterproductive behaviours. Moreover, including suspicious other reports in analyses substantially affected observed relationships between self and other ratings.

#### Limitations

We have no actual proof of whether or not a rating was fabricated.

#### Research/Practical Implications

Conclusions based on previous research using snowball sampling may in part be biased. Specifically, data may misrepresent populations of both targets and reports.

#### Originality/Value

To our knowledge, the study is the first to systematically examine this particular kind of bias.

### **The effectiveness of the money-motivation before and after job placement**

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The aim was to explore and compare the influence of the Money motivational object (J. Nuttin) on the person's motivational space before and after job placement.

Research had in-group design and consisted of 2 stages: test and retest (6 month later the test). 206 respondents (employees) were involved on the test stage and 82 (workers) – on the retest stage. For the study was used computer method for diagnostics of work motivation «Motivational map». Participants were instructed to compare 15 motivational objects with each other using three graphical two-dimensional spaces. They did it step by step putting motivational objects markers in the frame of axis. After 15 motivational objects were placed, participants were instructed to put object "Money" in the same frame of axes.

Results were:

1. Motivational object "Money" transforms the structure of motivational space before and after job placement.
2. Motivational object "Money" has a significant impact on more parameters of the motivational space before job placement.
3. There are motivational objects, at which the object "Money" has a significant influence before and after job placement.
4. Job placement is accompanied by a reassessment of the importance of such motivational objects as: "the probability of success of career growth", "the probability of success of achieving a sense of stability and confidence in future".

### **Using the JDR model in a psychological risk evaluation: The importance of specific job demands and resources to explain job-related health effects**

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#### **Purpose**

Psychological risks have become one of the most important issues for companies. Nevertheless, defining and evaluating it is still difficult (Nasse et Légeron, 2008). The JDR model (Bakker & Demerouti, 2007) argues that every occupation has its own specific risk factors associated with job-related stress (job demands and job resources). Our study was based on the JDR model in the context of a psychological risk evaluation and prevention in a french company. We focused on how specific demands and resources can explain the stress and exhaustion reported by the workers.

#### **Design/Methodology**

To develop our intervention, several investigation tools were used, such as a questionnaire built around work risk factors and their health effects (N = 230).

#### **Results**

Multilevel analysis supports the hypotheses and shows the importance of taking into account specific demands and resources of an organization to understand the worker's psychological risk exposure.

#### **Limitations**

To understand organisational context specificities, several investigation methods are required, especially when adapting a questionnaire. Within the framework of the JDR model, we needed to develop a more elaborate investigation than only a questionnaire, which shows to be a practical difficulty for researchers.

## Research/Practical Implications

This study shows how important the questioning of the context in a psychosocial risk investigation is in order to prevent it effectively.

## Originality/Value

The application of the JDR model is still marginal in France and to our knowledge, it's the first time it has been used in a psychological risk diagnosis and prevention within a company.

**West meets East (or does it?): The challenge of establishing measurement equivalence between European and Chinese versions of personality questionnaires**

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## Purpose

Measurement equivalence must be shown when tests are adapted cross-culturally. Establishing equivalence across national versions becomes more difficult the greater the cultural distance between the countries in question. This presentation gives an overview of the adaptation of "The Business-focused Inventory of Personality" (BIP) to a range of European cultures and to China. The BIP was selected as the focus for the presentation because it was originally developed in Germany; it is unusual for the source language of test adaptation not to be English.

## Design/Methodology

Comparative analysis across the different national versions was conducted using mean score comparisons and reliabilities of the BIP dimensions.

## Results

The focus will be on presenting those results showing non-equivalence between European and Chinese versions. Hypotheses for specific differences will be presented alongside implications for methodology.

## Limitations

Results illustrate the challenges in adapting personality questionnaires to different languages and cultures. Since personality is partly shaped by culture this is not surprising. Attempts to completely iron out cultural differences are likely to skew the validity of different national adaptations. How then do we reach equivalence without sacrificing local validity?

## Research Implications

Since the items that make up personality test scales tend to be behavioural manifestations of the traits being measured, cross-cultural adaptation needs to give greater initial consideration to the impact of culture on how traits are expressed as behaviour.

## Originality/Value

This paper attempts not just to report on a study of measurement equivalence across cultures but to question the conventional methodology in cross-national test adaptation.

**Van Dyne & LePine's (1998) helping and voice behaviours scale: Validation to a sample of Portuguese hospital workers**

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## Purpose

This poster aims to further develop and test the psychometric properties of the Helping and Voice Behaviours Scale (Van Dyne & LePine's, 1998) in a sample of Portuguese Healthcare workers, including reliability.

## Design/Methodology

In this study we conducted an Exploratory Factor Analysis, followed by a Confirmatory Factor of Van Dyne and LePine's (1998) 13 item "Helping and Voice Behaviours scale" in a sample of 140 hospital workers including doctors, nurses, administrative staff, etc.

### Results

Results yielded two dimensions, as expected; the best fit model differs from the originally presented by the authors of the scale, meeting the structure that emerged in the Portuguese exploratory study. Reliability of the respecified model is excellent for the global scale ( $\alpha=.95$ , 8 items), as well as subscales: Voice Behavior ( $\alpha=.92$ , 4 items) and Help Behavior ( $\alpha=.91$ , 4 items).

### Limitations

This study was conducted using a convenience sample in a relatively small context.

### Research/Practical Implications

Results could reflect to some extent specificities of the Portuguese hospital workers population, reporting to values and circumstances that are distinct from the North-American reality, that may include different conceptions of Helping and Voice Behaviors.

### Originality/Value

The present work studies the whole of workers in a hospital without making job distinctions, as it is done in the greater body of literature. This uncommon approach intends to be a preliminary study towards a better comprehension of healthcare workers globally, stressing their common work identity, focusing on the systemic side of the Hospital body of workers and their common conceptualization of psychometric constructs, instead of the more common job/sector approach.

# 19. Consumer behavior and marketing

## Single Papers

### Dimensions of corporate social responsibility as predictors of consumer behavior indicators: A question of subjective importance?

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#### Purpose

Previous research on Corporate Social Responsibility (CSR) has not addressed whether considering the subjective individual importance assigned to CSR dimensions by the customers might increase the validity of CSR dimensions when predicting consumption indicators (e.g., purchase intentions). Moreover, we argue that consumers emphasize dimensions with immediate reference for themselves compared to other CSR dimensions.

#### Design/Methodology

A total of N = 244 engineering, management, and psychology students evaluated given brands based on a large set of CSR characteristics derived from literature in a non-experimental paper-based survey. Additionally, participants assigned a subjective importance weighting to each CSR characteristic.

#### Results

In factor analysis four dimensions of CSR image emerged (i.e., customer responsibility, employee responsibility, law, and philanthropy) as discriminant predictors of consumption

indicators. Customer responsibility was found to be comparatively more important than the other CSR dimensions. Interestingly, across various (manifest and latent) analyses subjective weighting did not increase predictive validity of CSR dimensions.

#### Limitations

The scale's dimensional structure might vary across samples and target brands and should, therefore, be examined in further studies. Additionally, actual behaviors should be used as criteria.

#### Research/Practical Implications

Our findings point to four dimensions of CSR with discriminant predictive validity which cannot be increased by considering the consumers' importance weightings of CSR facets.

#### Originality/Value

Our research addresses the open question of internal and predictive validity of importance-weighted CSR dimensions from a customer perspective.

### Promoting green power – Influence of attitudes, comprehensibility, and involvement on persuasion in the context of renewable electricity products

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#### Purpose

With changing energy policies for example in Germany or Switzerland and the departure from nuclear power, governments, utilities and non-profit organizations try to promote renewable electricity products. Persuading consumers to purchase these products is challenging because their properties and benefits are complex and relatively difficult to comprehend. In order to design effective marketing communication to promote renewable energy products the present research analyses the influence of linguistic principles of com-

prehensibility, attitudes and involvement on persuasion.

#### Design/Methodology

Two experimental studies investigate these influences in the context of explanations of labels and technical terms. Study 1 (N = 167) uses a 2 (strong vs. weak involvement) by 2 (comprehensible – not comprehensible) between subjects design, investigating the interaction of involvement and comprehensibility and their influence on persuasion. Analyzing the interaction of attitudes and comprehensibility, Study 2 (N = 186) uses a 2 (positive vs. negative attitudes) by 2 (comprehensible – not comprehensible) between subjects design.

#### Results

Results indicate that comprehensible marketing messages are most persuasive for consumers with low involvement or negative attitudes towards renewable energy. For consumers with high involvement and positive attitudes comprehensibility does not influence persuasion.

#### Limitations

The research is limited to the context of renewable energies. Further research will be conducted analysing marketing communication for financial products.

#### Research/Practical Implications

Insights from this research contribute to a better understanding of persuasion in the context of renewable energies. Additionally, findings help to improve marketing communication to promote renewable energy products.

#### Originality/Value

These findings extend past research by empirically investigating the impact of linguistic principles of comprehension on persuasion.

### **“My products should be as sustainable as I am” - Explaining consumer decisions in the context of sustainable products**

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#### Purpose

Increasing awareness of environmental pollution increasingly drives the development of sustainable products. However, theoretical models explaining consumer behavior in the realm of sustainable products are still missing. Based on classic motivation research (e.g. McClelland, 1985), we developed and tested a theoretical framework explaining sustainable consumer decisions. In two studies, a multi-data approach was applied integrating objective behavioral data with subjective questionnaire-based data. Results confirm the hypothesized framework, showing that consumer decisions are grounded in individual motives that consumers cognitively match with characteristics of the target product. Consumers' motives in turn were related to their domain specific behavior. Ecological motives highly affected consumers' perceived matching with the target product. Findings highlight the need for research specifically focusing on consumer decisions in the realm of sustainable products.

#### Design/Methodology

In two studies (study 1: N = 83; study 2: N = 538), we applied a multi-data approach combining objective behavioral data with subjective questionnaire data.

#### Results

The hypothesized theoretical framework was confirmed by structural equation modeling.

#### Limitations

It is not yet clear whether findings are transferable to a broad range of sustainable products (including low-cost products).



**Research/Practical Implications**

The studies shed light on the complexity of consumer decisions in the realm of sustainable products providing a theoretical framework for researchers and professionals working in this field.

**Originality/Value**

To our knowledge, these are the first studies that integrate actual behavior, consumer motives and product relevant cognitions based on objective and subjective data to explain consumer decisions concerning sustainable products.

**Please, mom!! Mom, please, buy it!! An explorative study on nag factor**

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**Purpose**

The present paper aims at analyzing the nag factor (the tendency of children to unrelentingly request advertised items), with a special interest on one hand in verifying the influence of tv watching and of having a pocket money and, on the other one, on the counter-strategies adopted by parents.

**Design/Methodology**

We adopted a mix-method design. We asked 15 parents to fill in a diary for a whole week; the parents had to notice every evening, children's purchase requests and their reactions. These data were transcribed and analysed via critical discourse analysis. In addition, a sample of 100 parents of children aged between 3-14 years filled in the Italian version of the nag factor (NF) questionnaire (Ogba & Johnson, 2010).

**Results**

Discourse analysis identifies several children's strategies of requests and the consequent counter-strategies of parents. Moreover it emerged the positive effect of diaries, which

have increased parents' consciousness regarding NF, in line with an action research aims. Finally we have verified the influence of both tv watching and pocket money on NF.

**Limitations**

We should enlarge both the qualitative and quantitative datasets and enrich the study with some observational data collected in supermarkets.

**Research/Practical Implications**

Being potentially related to children obesity it is mandatory to study determinants and outcomes of NF in terms of prevention. In addition, this may be the basis to develop educational programmes to support critical consuming in children.

**Originality/Value**

Within the Italian context there are no studies (at least at our knowledge) related to NF.

## Posters

**A cross-cultural approach to user perception in the automotive industry using repertory grids**

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**Purpose**

Over the last decades electric vehicles have been publicly discussed as a post-fossil mobility solution. From a psychological stance, a positive user perception is a necessary precondition for a successful diffusion and adoption of electric vehicles. The present study investigates and compares the perception of electric vehicles in Germany and China.

**Design/Methodology**

The study uses the repertory grid technique to analyze user perception using a cross-cultural design.

50 Chinese and 50 German young adults were interviewed in order to understand their perception of electric mobility.

#### Results

The perception of electric mobility depends on nationality: Chinese interviewees strive for status and premium mobility whereas German respondents prefer functional mass mobility. Nonetheless, at its core the evaluation of electric vehicles is comparable; it is associated with an environmental friendly and practical form of mobility in both cases.

#### Limitations

The sample consisted of primarily young adults. No generalization to other demographic groups can be on the basis of this study.

#### Research/Practical Implications

The study revealed several aspects that differentiate national perceptions of electric vehicles. These should be of major concern for marketers in the field. Especially the difference of how to align the primary functional side of electric mobility with the Chinese desire for status deserves consideration.

#### Originality/Value

Very few studies have yet addressed cross-cultural user perception of electric vehicles from a psychological stance. Methodologically this study also presents a novelty, as the repertory grid method has not been applied in the field of cross-cultural user acceptance research of electric vehicles.

### **Does affective commitment to fellow customers lead to joint decisions on provider switching?**

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#### Purpose

We examine whether a customer is more willing to join a fellow customer in leaving a service provider given that the affective commitment to the fellow customer is particularly high. We scrutinize the role of a customer's affective as well as calculative commitment to the service provider in such decision processes and hypothesize that the components of the theory of planned behavior by Ajzen (1991) may function as mediators in these relationships.

#### Design/Methodology

The study used a scenario-based experiment with undergraduate students (N= 258) to test the hypotheses.

#### Results

The results provide evidence that both commitment to fellow customers and commitment to the service provider have consequences for customer's decision process to switch collectively the provider firm. The findings suggest that the components of the theory of planned behavior are partial mediators in the commitment-intention-relationships and provide further explanations for customer's decision process.

#### Limitations

The experimental study refers to only one service context leading to limited generalizability. In addition, the study ignores personality traits and past experiences with regard to provider switching which may influence customers' decisions.

#### Research/Practical Implications

The results imply that service providers may reduce customers' collective switching behavior by e.g. special offers for customer pairs or strengthen bonds between several customers. Providing a platform of valuable relationships to multiplex ties could be a barrier for customers to switch with only one of these persons.

#### Originality/Value

This research is the first to highlight the negative role of other customers as a target of customer commitment and, by this, identifies new determinants of customers' switching intentions.

#### **Eating together. Adherence to the mediterranean diet and the food choice as predictors of acculturation**

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Vincenzo Russo (Iulm Univ., IT), Massimo Bustreo (Iulm Univ., IT)

Italy has recently become aware of the socio-cultural dimensions of the second-generation immigrants. Despite the food cultural match of Mediterranean countries, indicators to calculate adherence to the Mediterranean Diet (MD) are still being discussed.

#### Purpose

According to the Italian Government criteria defining the MD (INRAN), the present research aimed to study food consumer behavior of Italian and immigrant families living in the metropolitan area of Milan.

The objectives are twofold:

- to investigate the adherence to the Mediterranean Diet (MD) of Italian and immigrant parents and their school-aged children;
- to examine the parents' Food Choice.

#### Design/Methodology

Mediating variables such as gender, Body Mass Index (reported) of parents and children, and socio-economic status were obtained.

Theory of acculturation (Teske et Nelson, 1974) and consumer socialization approach (Ward, 1974) was the theoretical frameworks.

Our hypothesis is that the adherence to the MD and the Food Choice of immigrant families may be predictive of Acculturation process.

The sample (N=1,900) is representative of Italian and immigrant families. The survey was conducted through a questionnaire. Multilevel analyses were carried out to support the hypothesis.

#### Results

Our research confirms the relevance of socio-cultural aspects as factors impacting diet-related behavior in families with school-aged children.

#### Limitations

To move forward the debate, a better understanding of what MD means, needs to be improved.

#### Research/Practical Implications

The findings can be used to improve communication policy and information dissemination. Furthermore, they should be available to implement education interventions addressed to consumers.

#### Originality/Value

To our knowledge, the process of Acculturation through adherence to the Mediterranean Diet and the Food Choice has never been investigated.

### **Mental accounting in the context of consumer decision making**

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#### **Purpose**

Mental accounting is a set of cognitive operations that is used by individuals to organize financial transactions (Thaler, 1999): Income and expenditures are grouped into categories. The theory of mental accounting contradicts the economic principle of fungibility, which indicates that regardless of source of income, spending patterns should follow the principle of maximising utility. However, the categorization of income may affect spending behavior (Fogel, 1997). This study aims to pursue research indicating that 'income accounting' affects consumer decisions.

#### **Methodology**

Based on pretest-results concerning the perception of different income sources and uses, we developed four scenarios, using a 2x2 design (tax refund vs. casino winning; 25€ vs. 250€). Each participant (N = 107) read one scenario and had to rank six alternative uses of money.

#### **Results**

Results indicated a significant main effect of income source and mental accounting and a significant three-way interaction ( $F(2,98) = 3.21, p < .05$ ). People using mental accounting and receiving a high amount of money differ in their spending behavior regarding the source of income: Money out of a serious income source (tax refund) was spent on a serious use (paying back bills). Casino winnings (frivolous income source) were spent on frivolous expenditures (buying presents).

#### **Limitations**

Asking people about their hypothetical reaction may be biased, research would benefit by being extended to more realistic settings.

#### **Implications**

In marketing, these findings can be used by positioning products either as necessities (for serious sources) or luxury goods (for frivolous sources).

#### **Originality**

There has been little research concerning the impact of 'income accounting' on spending behavior.

### **What do you think is comfortable in aircraft cabins?**

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The purpose of this study is the identification of important determinants influencing the comfort in the aircraft cabin.

The design and methodology is as follows:

In the first inquiry 10 pictures of aircraft cabins are shown in a slide presentation. The question according to the method of multidimensional scaling is: how many dimensions do the objects "pictures of aircraft cabins" have in a room of perception for the subjects?

Second, in interviews of about an hour people were asked about their experiences with air travelling.

In the third inquiry comfort factors were evaluated by passengers at Hamburg Airport.

The suggestion for hypotheses is: different aspects influence the factors concerning comfort like short, middle and long distance flights, business and economy class flights, the amount of air traveling and the fear of flying.

Results of the three data analyses will be presented.

The originality and value of this study is in the mixture of three empirical methods.

Unusual for that applied research area is the investigation in a more theoretical way without the dependence on companies of airplane manufacturers and airlines.

#### Limitations

Due to the fact that the scientific study was realized in Germany a generalization of the results to other countries or continents like America will be difficult because of different flying habits.

#### Research/Practical implication

Despite of the theoretical approach the results of this study can be of use to airplane manufacturers and airlines.





# 20. Entrepreneurship / Self-employment

## Single Papers

**The effect of an entrepreneurship training on the relationship of limited access to capital and start-ups: Complementing economic theories with psychological theories**

**Nominee of the EAWOP Congress 2013  
Best Paper Award**

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Economic theories suggest that limited access to capital is an entry barrier for new ventures and hinders successful start-ups (de Mel, McKenzie, & Woodruff, 2008; Ho & Wong, 2007; Naudé, Gries, Wood, & Meintjies, 2008). We argue that economic theories are not sufficiently explaining the effect of access to capital on entrepreneurship, but need to be supplemented by psychological theories. Based on the theoretical framework by Gielnik and Frese (in press), we suggest that characteristics of the entrepreneur and resources of the environment (e.g. financial capital) interact: We hypothesize that entrepreneurs can compensate for the negative effect of limited access to capital on entrepreneurship through a psychological intervention enhancing entrepreneurial cognitive frameworks.

We conducted a longitudinal randomized controlled field experiment with a pre-test post-test design. Out of a sample of 215 Ugandan students, we randomly assigned 109 students

to a training group that received the psychological intervention and 106 students to a control group that did not receive the intervention. The data collection covered four measurement waves in a period of 18 months.

As hypothesized, the results show that the psychological intervention (the entrepreneurship training) moderates the effect of limited access to capital on business start-ups. The moderation effect is mediated by entrepreneurial cognitive frameworks.

The results show that a psychological intervention is able to compensate for a lack of access to capital by developing entrepreneurial cognitive frameworks. Thus, the findings suggest that economic theories should be complemented with psychological theories to explain entrepreneurship.

**The interplay between risk propensity and entrepreneurship**

**Nominee of the EAWOP Congress 2013  
Best Paper Award**

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**Purpose**

This study sheds light on the complex relationship between risk propensity and entrepreneurship. It examines the role of risk propensity in predicting nascent entrepreneurship and entrepreneurial survival. Furthermore, this study extends prior research by investigating whether the occupational experiences made during self-employment also lead to a greater subsequent risk propensity.

**Design/Methodology**

Building on a sample of 4,015 individuals from the German Socio-Economic Panel (GSOEP), we made use of regression analyses and propensity score matching to evaluate the inter-

play between risk propensity and entrepreneurship over a 6-year time period.

#### Results

Results indicate that while risk propensity positively predicts the decision to become self-employed, the relation between risk propensity and entrepreneurial survival follows an inverted U-shaped curve. Furthermore, the occupational change into self-employment leads to higher subsequent levels of risk propensity only amongst a sample of successful nascent entrepreneurs.

#### Limitations

Although the causal claims are well supported by the longitudinal design and methodological approach taken, only an experimental design, albeit difficult to implement, could rule out any uncertainties. Furthermore, the sample included German respondents only.

#### Research/Practical Implications

By distinguishing between the effects of risk propensity on entrepreneurial intentions and survival, the present study is of practical importance for career counseling and government organizations interested in promoting and sustaining self-employment.

#### Originality/Value

This study suggests that different magnitudes of risk taking are associated with the decision to start a business and with succeeding in that occupation. It furthermore is the first to show that experiences made in the beginning of entrepreneurship may enhance the subsequent propensity to take risks.

### **The joint effects of proactive feedback seeking and self-efficacy on entrepreneurial role clarity: A two-wave study**

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#### Purpose

Uncertainty is fundamental to entrepreneurship. By integrating theory on effectuation (Saravathy, 2001) and self-efficacy (Bandura, 1997), we study the proactive tactics used by entrepreneurs to deal with uncertainty. Specifically, we examine how entrepreneurs' feedback-seeking behavior impacts entrepreneurial role clarity (i.e., the degree of uncertainty about the effectiveness of one's behavior in terms of obtaining desired outcomes) over time. Self-efficacy is investigated as a moderator of this relationship. We hypothesize that proactive feedback seeking will increase entrepreneurial role clarity over time, but only for entrepreneurs high in self-efficacy.

#### Design/Methodology

We tested our model using survey data from a sample of entrepreneurs in Belgium collected at two points in time. On Time 1, 271 entrepreneurs responded. At present (5 months later), Time 2 data is being collected.

#### Results

Analysis of Time 1 data provided support for the hypothesized relationship: direct feedback seeking increased entrepreneurial role clarity, but only for entrepreneurs high in self-efficacy. Using Time 2 data, we aim to test whether this relationship is supported over time.

#### Limitations

It remains to be explored how different types of feedback can influence other types of uncertainty as experienced by entrepreneurs.

#### Research/Practical Implications

Our results take a step in informing researchers and practitioners of the proactive tactics that entrepreneurs can use to manage uncertainty.

**Originality/Value**

Effectuation and self-efficacy have received a lot of research attention in the entrepreneurship literature. In this study, we aim to integrate these two perspectives by studying their joint effects on the experience of uncertainty by entrepreneurs.

**Early stages of entrepreneurship process: Pattern recognition, causation and effectuation**

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**Purpose**

The present research aims to integrate results in business opportunity and entrepreneurial decisions based in pattern recognition theory (Baron, 2006) and causation and effectuation theory (Saravathy, 2001). We expect effectuation to be more associated to business opportunity recognition; and causation to be more associated to decision to launch a venture.

**Design/Methodology**

We used a sample of 51 entrepreneurs engaged in a venture capitalists competition. The entrepreneurs were mainly male (77,2%), and their ages ranged from 21 to 56 years old. Most of the entrepreneurs had no previous entrepreneurial experience (58,1%). We collected data at two time moments.

**Results**

Business opportunity recognition ( $t(50)=75,11$ ;  $p<0,01$ ), decision to launch a venture ( $t(50)=67,50$ ;  $p<0,01$ ), causation ( $t(50)=52,79$ ;  $p<0,01$ ) and effectuation ( $t(50)=40,60$ ;  $p<0,01$ ) have significant mean differences. According to our predictions, main results show that effectuation explains 15,1% of business opportunity recognition ( $F(5;0,90) = 2,78$ ,  $p < 0,05$ ), and causation explains 18,3% of the

decision to launch a venture ( $F(5;0,74)=3,24$ ,  $p < 0,05$ ).

**Limitations**

This research is based in a small sample size which limits the data analysis. The measures required recalling previous experiences and thus responses might be biased.

**Research/Practical Implications**

The current study contributes to the theoretical debate on business opportunity through the comparison of the pattern recognition and causation and effectuation approaches. It can also contribute to develop more effective training programs in entrepreneurship.

**Originality/Value**

This is a “hot topic” on entrepreneurship research and we expect that the results contribute to a theoretical development through the analysis of the relation pattern among both frameworks.

**Predicting entrepreneurial activity in Europe during the recession**

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**Purpose**

The recession of 2008 has resulted in unemployment, job redesign and reduced job security across Europe. However, one positive outcome of recession is an increase in entrepreneurship. This study examines determinants of entrepreneurial activity among members of the working population in France (N = 1140), the UK (N= 927) and the Netherlands (N= 598) during the recession.

**Design/Methodology**

Participants were nationally representative samples who voluntarily participated in the 16PF online validation study in 2011.

## Results

For France, the best predictors of entrepreneurial activity were privateness ( $W=7.89$ ,  $df=1$ ,  $p=0.005$ ,  $B=0.129$ ); years currently employed ( $W=6.49$ ,  $df=1$ ,  $p=0.011$ ,  $B=0.028$ ); reasoning ( $W=6.17$ ,  $df=1$ ,  $p=0.013$ ,  $B=0.130$ ) and abstractedness ( $W=5.61$ ,  $df=1$ ,  $p=0.018$ ,  $B=-0.155$ ). Similarly for the UK, personality traits of tension ( $W=8.09$ ,  $df=1$ ,  $p=0.004$ ,  $B=0.130$ ); sensitivity ( $W=6.62$ ,  $df=1$ ,  $p=0.010$ ,  $B=0.121$ ); abstractedness ( $W=19.59$ ,  $df=1$ ,  $p=0.000$ ,  $B=-0.221$ ) and openness to change ( $W=7.75$ ,  $df=1$ ,  $p=0.005$ ,  $B=-0.122$ ) were significant predictors of business start-ups. However for the Netherlands, only current hours worked per week significantly predicted the likelihood of starting a business with fewer hours worked more associated with entrepreneurship ( $W=-13.60$ ,  $df=1$ ,  $p=0.000$ ,  $B=-0.031$ ). Further analyses revealed that country does have a significant effect on entrepreneurial activity.

## Limitations

The study is correlational in design and findings can only be interpreted in relation to the peak of the recession during 2011.

## Research/Practical Implications

Results have important implications for employability and career success in Europe, particularly in times of economic turbulence.

## Originality/Value

The research highlights the importance of individual factors in European discourse on recession recovery and the role of occupational psychologists in providing country-specific approaches to career success.

## Posters

### Entrepreneurial competencies profiles: Different patterns for intentions and predisposition to consider entrepreneurship as a career option

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#### Purpose

The purpose of this study is to analyse the entrepreneurial intentions and the predisposition to consider entrepreneurship as a career option by temporary workers, according to their perception of their entrepreneurial competencies.

#### Design/Methodology

The correlation between entrepreneurial intentions and the predisposition to consider entrepreneurship as a career option of 119 temporary workers was analysed. We performed a multiple correspondence analysis (MCA) to identify profiles in temporary workers' entrepreneurial competencies according to their different intentions and predisposition towards entrepreneurship.

#### Results

Results show that there is a negative correlation between intention to launch a venture and perceiving entrepreneurship as a career option. On the one hand, temporary workers who have positive intentions but do not have a predisposition to consider entrepreneurship as a career option consider themselves as having strong resilience and emotional intelligence. On the other hand, temporary workers who have negative intentions but have a predisposition to consider entrepreneurship as a career choice perceive themselves as having medium or weak entrepreneurial competencies.

**Limitations**

Limitations in the present study and suggestions for improvement are presented.

**Research/Practical Implications**

Directions for future research and practice concerning the importance of entrepreneurial activities in organizations and entrepreneurship training are also presented.

**Originality/Value**

This study is a first step in understanding how emerging groups in a changing work environment perceive entrepreneurship as well as their skills to engage in entrepreneurial activities. We could observe that a group that is increasing in the job market does not perceive itself as having the necessary competencies to be entrepreneurs.

### **Young companies and entrepreneurs: A study on start-ups from the psychological point of view**

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**Purpose**

Entrepreneurship evolves rapidly, involving the economic structure of countries and setting new organizational parameters. In Italy the phenomenon has blossom recently. The purpose of this first step of the research is exploratory: at first, identifying characteristics of groups of young people who become entrepreneurs, creating a start-up, then building a scale to investigate these characteristics, motivations, attitude for entrepreneurship and climate for entrepreneurship.

**Design/Methodology**

11 entrepreneurs were interview via web (because of the common use of internet for "new generation" companies) and at incubator, which supports their start-up phase. Interviews, exploratory in reference to Grounded Theory (GT), asked participants to tell their

own experience. Analyses have been made by Atlas.ti 5.0.

**Results**

We codified 201 codes, from which emerged many groups (families) related to the birth of their idea, background and education, why become an entrepreneur, strengths and weaknesses of being a start-up, work in start-ups, characteristics of team for start-ups, difficulties, emotions, needs, serendipity, why start-ups do it better,...

**Limitations**

The sample, deliberately limited to start-ups with a high content of technological knowledge. The use of interviews as a method of investigation maybe a limit point, but this research is the first scientific approach and will be next explore by quantitative measures extended to Italian start-uppers.

**Research/Practical Implications**

The identification of key elements interesting for many organizations, which are mobilizing to support young entrepreneurs on business and teamwork.

**Originality/Value**

There are very few studies on start-ups from a humanistic perspective. Many interesting constructs as creativity, innovation, engagement could be investigated in extensive researches on this specific sample.

### **Entrepreneurship at higher education – Can entrepreneurship be learned as a set of competencies?**

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**Purpose**

This study aims to evaluate the efficacy of a training course designed to develop entrepre-

neurial cognitive competencies within Portuguese and German university students. Moreover, cognitive structures (prototypes) in both national samples will be compared. Overall, we expect that, regardless the culture students will evaluate business opportunities more accurately after the training and over time. However, differences between prototypes across German and Portuguese students are not excluded.

#### Design/Methodology

We developed a training course based on Baron and Ensley's (2006) business opportunity prototype definition and pattern recognition perspective for opportunity recognition.

Data about the use of the prototype is collected in three moments: before and immediately after the course as well as one month later.

#### Results

Preliminary results provide evidence that Portuguese students (N=77) identify business opportunities more accurately after the training. In particular, immediately after the training they score higher on the dimensions of the prototype: solving customer's problems, generating cash flow and manageable risk.

This is a work in progress and currently data is collected among both German and Portuguese students.

#### Limitations

At the moment the sample size is quite modest, however more data is being collected. Nonetheless, the sample mortality and others setbacks related to this type of research design cannot be excluded.

#### Research/Practical Implications

Results can be used to develop other training programs in order to create an entrepreneurial mindset for students.

#### Originality/Value

This paper contributes to psychology of entrepreneurship and cross cultural research. It aims to demonstrate that it is possible to increase students' entrepreneurial cognitive competencies regardless culture and to create a common entrepreneurial mindset.

### **Entrepreneurs' attributions to success and failure in the contemporary economic environment**

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#### Purpose

Entrepreneurs are critical to the economy because they create wealth and jobs. The ongoing economic crisis, however, has reduced access to funding and the public's spending power. This may affect entrepreneurial activity by means of making entrepreneurs less confident and less willing to continue their activities. The study investigated attributions of success and of barriers to success of entrepreneurs.

#### Design/Methodology

The research utilized survey methodology [e.g., validated scales such as Hodgkinson's (1992) strategic locus of control] supplemented with open-ended interview questions. Participants were entrepreneurs from six US States who were matched with an equal number of individuals in salaried positions in firms (those completed the questionnaire part of the measures).

#### Results

Open ended questions were content analyzed, codified and arranged into categories, while responses to scales were added up. Entrepreneurs exhibited strong internal strategic locus of control, and made strong internal attributions for success. On the other hand, their attributions to barriers to success were rather



balanced between internal and external. This did not perfectly concur with the self-serving bias that was hypothesized. Entrepreneurs were more self-efficacious than their salaried counterparts. Prior venturing experience made entrepreneurs more likely to make internal attributions.

#### Limitations

Generalization to other countries/cultures (e.g., with more state protectionism) remains to be confirmed.

#### Research/Practical Implications

Comparison with earlier studies (e.g., Rogoff, Lee & Suh, 2004) implies that the financial crisis has made entrepreneurs less self-biased in their attributions.

#### Originality/Value

The study, among others, provides indirect evidence that attributions of entrepreneurs may change as result of long-occurring changes in the economic environment.

### **Development of the entrepreneurial job demands scale**

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Josette Dijkhuizen (Tilburg Univ., NL), Marc van Veldhoven (Tilburg Univ., NL)*

#### Purpose

A scale for measuring specific entrepreneurial job demands was developed and validated in a study among entrepreneurs in The Netherlands.

#### Design/Methodology

We used literature and in depth interviews in study 1 to formulate entrepreneurial job demands. In study 2 a quantitative study was executed to test the psychometric quality of the 15-item scale in a sample of 291 entrepreneurs. The relationship of entrepreneurial job demands with variables of strain and well-being were examined (study 3). Differences between entrepreneurial and regular job de-

mands were studied through analysis of variance in a multiple linear regression analysis.

#### Results

Principal Component Analyses showed four dimensions within the Entrepreneurial Job Demands Scale, namely 'time', 'uncertainty', 'responsibility', and 'risk'. The scale showed criterion validity in explaining work-related strain (positive) and well-being (negative), over and above regular measures for job demands. We conclude that the specific entrepreneurial job demands explain a substantial amount of the variance in the scales for work-related strain and those for well-being. Regular job demands add little to the variance.

#### Limitations

There are several limitations to this study: a) for further research other scales can be considered for strain and well-being; b) physical demands could be taken into account when measuring the entrepreneurial demands, and c) only entrepreneurs in The Netherlands were studied.

#### Research/Practical Implications

The Entrepreneurial Job Demands Scale is a helpful instrument to become aware of the demands causing strain. Different techniques for entrepreneurs can help reduce strain and increase well-being.

#### Originality/Value

In investigating entrepreneurial strain the specific entrepreneurial job demands must be taken into account, over and above regular job demands.



# 21. Economic Psychology

## Single Papers

### **Advice taking and advice giving as social exchange: Bringing (some) organizational realism into the judge-advisor-paradigm**

*Stefan Schulz-Hardt (Georg-August-Univ. Goettingen, DE) [schulz-hardt@psych.uni-goettingen.de](mailto:schulz-hardt@psych.uni-goettingen.de), Christian Treffenstädt (Georg-August-Univ. Goettingen, DE), Thomas Schultze (Georg-August-Univ. Goettingen, DE)*

#### Purpose

The most prominent finding in the judge-advisor literature is that people give less weight to advice than they rationally should, thereby compromising judgment accuracy. However, the typical judge-advisor paradigm provides participants with anonymous advice, whereas advice-taking in organizations usually involves social interaction. In three experiments, we tested 1.) how such interaction affects advice weighting and 2.) how being under- or overweighted impacts the advisor's subsequent effort.

#### Design/Methodology

In Experiments 1 and 2, in a series of estimation tasks participants first made initial judgments, subsequently received an advisor's estimations, and then gave final estimates. In Experiment 1, it was manipulated whether the advisor was present and could track to what extent the advice was weighted (as compared to being absent and not being informed about this weighting). Experiment 2 disentangled these two features. In Experiment 3, the participants played the role of the advisor, and a confederate gave either high or low weight to their advice.

#### Results

Advice weighting was higher when the advisor could track to what extent she/he was weighted, to the extent that almost no underweighting was observed in this condition. Advisors whose advice received low weights exhibited less effort in subsequent trials, even if their relatively low competence justified such low weighting.

#### Limitations

Laboratory experiments with student samples.

#### Research/Practical Implications

Direct interaction with the advisor is useful to make advice weighting more rational. Overweighting advice can be useful to ensure that the advisor will cooperate in the future.

#### Originality/Value

This is the first systematic study of social exchange processes in the judge advisor paradigm.

### **Managers' implicit and explicit risk-attitudes in managerial decision making**

*Jenny V. Bittner (Univ. of Twente, NL) [j.v.bittner@utwente.nl](mailto:j.v.bittner@utwente.nl), Julia Landwehr (Univ. of Kassel, DE)*

#### Purpose

We examined the contribution of implicit and explicit risk-attitudes to the prediction of risky management decisions. Indirect methods allow for the measurement of implicit attitudes, while self-report is typically used to measure explicit, reflective attitudes. Indirect methods make it difficult to fake test results or use impression management, because they are based on reaction times and assess the strengths of associations in memory.

#### Design/Methodology

In a field experiment, managers were tested for their implicit and explicit risk-attitudes and were asked to make risky management decisions. An Implicit Association Test (IAT) was

constructed to measure implicit risk-taking and compared to an explicit risk questionnaire in its influence on several management decisions.

#### Results

Results showed that the chance that managers take the risk is significantly higher when the IAT classified them as risk-seeking. This, however, was only found if the decision was framed as a loss situation. Under a gain framing, the IAT was not a significant predictor, but the explicit measure significantly differentiated between managers choosing the risk versus not.

#### Research/Practical Implications

These results can be explained by theories on impulsive decision making. Implicit attitudes may assess impulsive risk-decisions in loss situations better than explicit attitudes. It would be worthwhile to further develop indirect measures to assess managerial decision making.

#### Originality/Value

In loss situations, managers may make decisions more impulsively. Thus, implicit attitudes may predict risky decision making in loss situations better than explicit attitudes.

### **Tax authorities' measures to enhance tax payments: A laboratory experiment to test the impact of coercive or legitimate power on taxpayers' compliance**

*Eva Hofmann (Univ. of Vienna, AT) [eva.hofmann@univie.ac.at](mailto:eva.hofmann@univie.ac.at), Martina Hartner-Tiefenthaler (Vienna Univ. of Technology, AT), Katharina Gangl (Univ. of Vienna, AT), Kirchler Erich (Univ. of Vienna, AT)*

#### Purpose

It is the aim of the current study to investigate (1) the effect of coercive or legitimate power on tax payments and (2) to what extent the contrast between power intensities (low vs. high power) has an impact.

#### Design/Methodology

In a 2 x 2 x 2 design (coercive vs. legitimate power, between subjects; low vs. high power intensity, between subjects; time 1 vs. time 2, within subjects) 150 students base tax decisions (2 x 20 rounds) on scenarios depicting fictitious tax authorities' power.

#### Results

Results reveal that power, power intensity and power changes interact with each other. (1) When power intensity is low, coercive power leads to higher payments than legitimate power. High coercive power and high legitimate power do not differ. (2) While legitimate power has the expected effect on tax payments (effect of intensity, but no effect of change), the impact of high coercive power holds on even after a change to low coercive power.

#### Limitations

However, in the present study scenarios describing authorities' measures are used, the participants miss an actual coercive or legitimate treatment. This might limit the robustness of the results.

#### Research/Practical Implications

Theoretically, the effect of coercive power seems to be more complex than of legitimate power. Practically, this means that authorities' lack or reduction of supportive procedures has a more negative impact on tax payments than the lack or reduction of enforcement.

#### Originality/Value

The current study is one of the first experiments to investigate the impact of coercive and legitimate power intensities on tax payments which are respectively remunerated.

## The effect of coercive power and legitimate power of tax authorities on tax behavior

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### Purpose

Tax authorities can apply either coercive power or legitimate power to ensure tax compliance. The purpose of the current study is to examine if and how coercive power and legitimate power influence tax payments and related psychological constructs such as reactance, rational consideration, trust, self-efficacy and motivations to comply, i.e. enforced tax compliance and voluntary tax cooperation.

### Design/Methodology

With a sample of 80 students both qualities of power were experimentally manipulated with scenarios in a within-subject design.

### Results

Results show that coercive power leads to lower tax payments and additionally, to higher feelings of reactance, more rational consideration, more enforced motivation to comply and less trust, self-efficacy and voluntary motivation to cooperate than legitimate power. Moreover, the results suggest that the impact of coercive power on tax payments is mediated through rational consideration and enforced compliance whereas the impact of legitimate power on tax payments is direct.

### Limitations

The current study is based on a single within-subject experiment in the context of tax payments which is a limitation to the robustness and generalizability of the results.

### Research/Practical Implications

Theoretically the current study suggests that coercive power is less effective and more

complex than legitimate power in influencing tax compliance. Thus, for practitioners it is recommended to change from coercive power to legitimate power to increase tax behavior and positive attitudes and motivations to comply with tax law.

### Originality/Value

The present study is a rare attempt to experimentally analyze the impact of coercive power and legitimate power of a tax authority on tax behavior.

## The Impact of biased information on escalating commitment

Thomas Schultze (Georg-August-Univ. Göttingen, DE) [schultze@psych.uni-goettingen.de](mailto:schultze@psych.uni-goettingen.de), Stefan Schulz-Hardt (Georg-August-Univ. Göttingen, DE)

### Purpose

Escalating commitment denotes increased persistence in a failing course of action. Previous research showed reduced commitment when decision makers received additional information in favor of withdrawal. However, at odds with real life decisions, this information was always reliable and trustworthy. Hence, we aimed at investigating how decision makers react towards information that is supposedly (Experiment 1) or certainly (Experiment 2) biased towards continuation of or withdrawal from a project.

### Design/Methodology

Participants worked on a case study in which one of two projects was chosen for initial funding. Half of the participants chose the project themselves. Profits declined steadily after funding, indicating potential failure. Participants received additional information suggesting either continuation of withdrawal. In half of the cases this information was stated to be biased. Finally, participants decided how much money to reinvest.

### Results

Participants reinvested more when they were responsible for the first decision. They also invested more when the additional information suggested continuing the project. This effect was reduced when information was likely to be biased (Experiment 1) or certain to be biased (Experiment 2), but it did not disappear. Hence, even when being forewarned about the biased nature of the additional information, decision-makers did not ignore it.

### Limitations

Laboratory experiments with student samples.

### Research/Practical Implications

Escalating commitment can lead to severe financial losses. Decision makers must be aware that they seemingly cannot ignore clearly biased information.

### Originality/Value

This is the first study investigating how overtly biased information influences decision makers' tendency to escalate commitment in investment decisions.

## **To make the financial value of corporate communications measurable and communicate successfully**

*Florian Gross (Lang & Tomaschtk Communications, AT) [florian.gross@lang-tomaschtk.cc](mailto:florian.gross@lang-tomaschtk.cc), Gerald Kolar (FH Wien Univ. of Applied Sciences of WKW)*

### Purpose

Communication is one of the main factors for the corporate image (Rolke, 2007). Business ratios for the creation of corporate image have to be valuable and measurable. Undertakings work primarily through communication and relationships; and the quality of those interactions directly impacts the business results. The performance of communication should be translated into the language of financial managers and therefore appropriate tools are needed.

### Design/Methodology

The present study should point out which models for Communication Controlling already exist, how they are used and which benefit they are able to gain. The polled experts were communication- and finance managers of six of Austrians top 500 companies.

### Results

The analysis shows that so far a recognized model for Communication Controlling is missing. There is one particular model which matches the necessary criteria and which could be a possible solution. For a transparent communication and transformation of communication KPIs into valuable financial KPIs fitting rating models and standardized wordings are required.

### Limitations

Critical points of all considered models are possible subjective elements of chosen indicators. Quality facts are hard to translate into financial systems and numbers and even a performance measurement system just solves this challenge partly.

### Research/Practical Implications

The considered models are only effective if even finance managers as well as communication managers find common values and definitions.

### Originality/Value

Due to this point there is only less research concerning a lack of internal communication between financial- and communication managers. Furthermore due to today the value and the costs of communication do not play a strong part in the financial units.



## Posters

### How personal characteristics and social network participation influence economic choice

*Irina Zinovieva (Sofia Univ. St. Kliment Ohridski, BG) [zinovieva@arcor.de](mailto:zinovieva@arcor.de), Momchil Kiryakov (Sofia Univ. St. Kliment Ohridski, BG), George Mengov (Sofia Univ. St. Kliment Ohridski, BG)*

#### Purpose

We investigate how personal characteristics affect people's economic decisions in a laboratory experiment conducted in a virtual social network. We assess and quantify the synergy between personality and network in economic performance.

#### Design/Methodology

The experimental design involves a profit-maximizing game and is built around three factors: (i) choice by a subject in isolation vs. choice, influenced by other participants in the network; (ii) availability/absence of relevant econometric indicators to guide psychological expectations; (iii) economic prosperity generating hedonic treadmill vs. prosperity followed by a downturn and treadmill disruption.

The participants' spontaneously formed strategies are revealed in post-hoc interviews. A two-part questionnaire examines: (i) psychological aspects of decision making during the game; (ii) relevant personality traits such as: extraversion/introversion, neuroticism, openness to experience, achievement motivation, perceived self-efficacy, and sense-making.

#### Results

This study shows how the access to a virtual social network helps a participant achieve better economic outcomes, provided that they have the personal characteristics, suitable to obtain the most advantage.

#### Limitations

All data come from a laboratory setting. Yet, as our design is a simplified version of real markets, it bears a substantial degree of ecological validity.

#### Research/Practical Implications

New knowledge about the intuitive reasoning of the economic agent is produced and related to the psychology of markets.

#### Originality/Value

This is probably the first study on agent behaviour during the birth and early evolution of a virtual social network.

### Acute stress and advice taking

*Andreas Mojzisch (Univ. of Hildesheim, DE) [mojzisch@uni-hildesheim.de](mailto:mojzisch@uni-hildesheim.de), Thomas Schultze (Univ. of Goettingen, DE), Marie Juli (Univ. of Muenster, DE), Stefan Schulz-Hardt (Univ. of Goettingen, DE)*

#### Purpose

When facing important economic decisions, people often consult others for their opinion. Previous research shows that advice taking helps us to make more accurate judgments. However, we tend to place too much weight on our own initial judgments and substantially underutilize advice. The present experiment sought to examine the effect of acute stress on advice taking.

#### Design/Methodology

Participants were randomly assigned to either the Trier Social Stress Test (TSST) or a placebo version of the TSST. As a biomarker of stress, salivary cortisol was assessed once before and three times after the TSST or Placebo-TSST. In order to measure advice taking, we employed the judge-advisor-system (JAS). In the JAS, one person (the judge) is tasked with making an initial judgment. The judge then receives advice in the form of the judgment another person (the advisor) made. Finally, the judge makes a second, possibly revised, judgment.

The JAS allows determining how strongly the advice was heeded by measuring how much the judge adjusted the final estimate towards the advice.

#### Results

Acute stress significantly reduced advice taking. Moreover, the stress-induced increase in cortisol was negatively correlated with advice taking.

#### Limitations

It remains to be seen how strong these effects are when examined in real world organizations.

#### Research/Practical Implications

Every day, millions of dollars change hands to receive advice. Hence, practitioners need to be well aware of the factors affecting advice taking.

#### Originality/Value

To the best of our knowledge, this is the first experimental study investigating the effect of acute stress and neuroendocrine stress reactions on advice taking.

### **Motivating moral action in organizations: The effects of omission bias and the affect heuristic on perceptions of moral intensity**

*David Michael Wasieleski (Duquesne Univ., Pittsburgh, PA, US & ICN Business School, Nancy, FR) [wasieleski@duq.edu](mailto:wasieleski@duq.edu), Gustav Lundberg (Duquesne Univ., Pittsburgh, PA, US & Swedish School of Economics and Business Administration, Helsinki, FI), Sefa Hayibor (Carleton Univ., Ottawa, Ontario, CA)*

#### Purpose

The failure to act in an ethical dilemma is a chronic problem in business. The consensus among ethicists is that there is a palpable distinction between action and inaction from a moral standpoint. We examine whether acts of commission and omission change individu-

als' perceived ethicality of the issue assuming substantive moral relevance.

Moral intensity is the perceived ethical severity of an issue. Faced with an ethical issue, an agent's decision-making is influenced by how intense she perceives the issue to be. The more intense a decision-maker perceives an issue, the more likely that agent will be motivated to resolve the issue in an ethical manner. We seek how to manipulate a person's perceived moral intensity of an issue.

#### Design/Methodology

We operationalize moral intensity as the dependent variable. We contend that perceived moral intensity of the issue is affected by the inaction and emotions. Our experiment stimuli consist of sets of scenario pairs, framed as omissions and commissions. After each case, we obtain respondents' affective impressions of the issue.

#### Results

We tested a sample of business practitioners in the US, France and Canada and find statistically significant differences of moral intensity perceptions based on omission/commission and anticipated regret related to affective responses.

#### Research/Practical Implications

The OB field could be informed by the moral intensity construct in that the emotions activated by issue perceptions can lead to a greater understanding of the implications of inaction in business.

#### Originality/Value

No research has examined the effect of a new dimension on moral intensity—omission bias, nor the role of the affect heuristic on perceived moral intensity.

### **Immediate vs delayed feedback – The effects of timeliness of feedback on tax compliance and trust**

Jennifer Stark (Univ. of Vienna, AT) [jennifer.stark@univie.ac.at](mailto:jennifer.stark@univie.ac.at), Christoph Kogler (Univ. of Vienna, AT), Luigi Mittone (Univ. of Trento, IT), Erich Kirchler (Univ. of Vienna, AT)

#### **Purpose**

The present study investigates the effects of institutional uncertainty created by delayed feedback on tax compliance and trust, focusing on extreme behavioural effects such as “all or nothing” behaviour (Alm et al., 1992a) and the bomb-crater effect (Mittone, 2006) within the slippery slope framework (Kirchler, Hoelzl, & Wahl, 2008).

#### **Design/Methodology**

A computer aided laboratory experiment that collected behavioural as well as questionnaire data was conducted with a sample of N = 129 students.

#### **Results**

Analyses showed that timeliness of feedback had a significant effect on the mean percentage of tax payments, on “all-behaviour” as well as “nothing – behaviour” and trust. Delayed feedback resulted in higher percentages of tax payments, in more “all – behaviour” and less “none – behaviour” as well as lower levels of trust than immediate feedback. Furthermore, evidence for the bomb-crater effect was rendered.

#### **Limitations**

The artificial laboratory setting as well as the student sample has to be taken into account when considering the external validity of the findings as well as the generalization of the results upon the population of taxpayers.

#### **Research/Practical Implications**

Since delayed feedback induces institutional uncertainty and affects tax compliance as well as trust, it could, with caution, be applied as a policy tool to enhance tax compliance.

#### **Originality/**

The findings of the present study render valuable insights into yet another factor that has an impact on tax compliance, extreme tax behavioural reactions and trust in the tax authorities.

### **Stress and strategic decision-making in the beauty contest game**

Johannes Leder (Univ. of Erfurt, DE) [johannes.leder@uni-erfurt.de](mailto:johannes.leder@uni-erfurt.de), Jan Alexander Häusser (Univ. of Hildesheim), Andreas Mojzisch (Univ. of Hildesheim)

#### **Purpose**

Often, economic decisions not only depend on one's own preferences, but also on the choices of others and therefore require strategizing (i.e., thinking about what others might think). In experimental economics, such decisions are modeled in the beauty contest game. Furthermore, economic decisions are often carried out under stress. For example, stock-market brokers make strategic decisions under high time constraints while experiencing enormous competitive pressure. Therefore, in the present study, we aimed to examine the influence of stress on decision-making in the beauty contest game.

#### **Design/Methodology**

To investigate the influence of stress on strategic decision making sixty male participants were randomly assigned to either the Trier Social Stress Test for Groups (TSST-G) or a placebo version of the TSST-G. After the experimental manipulation, participants had to play four rounds of a beauty contest game. As a biomarker of stress, salivary cortisol was measured.

#### **Results**

Participants under stress chose higher numbers in the beauty contest game than non-stressed participants, indicating less strategiz-

ing. This effect was mediated by the stress-induced increase in cortisol.

#### Limitations

Our study did not touch the question whether stressed individuals perform worse than non-stressed individuals in strategic interactions.

#### Research/Practical Implications

From a practical point of view, our results suggest that stressed traders use less public information or what they expect the average public expects, but rather base their choice on private information.

#### Originality/Value

To our knowledge this is the first study that experimentally examined the effect of stress on strategizing in decision making.

## 22. Other Work and Organizational Psychology topics

### Invited Symposia

#### From Distributed Teams to Collaboration in Virtual Settings

Session Chair: *Matti Antero Vartiainen (Aalto Univ. School of Science, DIEM, TPS)*  
[matti.vartiainen@aalto.fi](mailto:matti.vartiainen@aalto.fi)

This invited symposium gives an overview on the development of distributed teams towards flexible collaboration from multiple places using virtual working environments to increase proximity and presence of team members. The emergence and implementation of these new forms of working challenge our conventional team and group process concepts by asking for their relevance and validity. Some twenty years has passed from the first writings about virtual organizations – and later teams. During this time empirical evidence has accumulated offering bases to formulate some working and leadership practices. Simultaneously new technologies such as virtual worlds have provided new possibilities to enrich collaboration environments used for intra- and inter-team communication and interaction. This symposium discusses on this development showing the challenges which rise from working in different cultural contexts, and how these challenges are related to group processes and team member characteristics when working in distributed settings. The symposium starts by presenting how the concept of team virtuality has evolved (Travis

Maynard). Next paper (Sirkka L. Jarvenpaa & Elizabeth Keating) concentrates on trust repairing strategies in global collaboration. Stefan Krumm and Guido Hertel describe what KSAOs are needed in virtual teamwork. Carolyn Axtell, Karin Moser and Janes McGoldrick in their paper report about the effects of status on norm violations perceptions within virtual communications. Finally, Marko Hakonen and Emma Nordbäck talk about decision-making in virtual working environments (VEs).

#### *Presentations of the Symposium*

##### **Team virtuality: lessons learned over the last decade**

*M. Travis Maynard (Colorado State Univ., US)*  
[Travis.Maynard@business.colostate.edu](mailto:Travis.Maynard@business.colostate.edu)

##### **Purpose**

A decade ago, in a review of the virtual team literature, a change was noted – that the literature was moving away from comparisons between face-to-face and virtual teams. Instead, research in the arena of virtual teams was starting to shift to a consideration of the impact of a team's extent of virtuality. Given that it has been a decade since this transition started in earnest within the virtual team literature, the time is right to assess how the concept of team virtuality has evolved, as well as to review the empirical research within this area.

##### **Design/Methodology**

Studies for this literature review were identified through four means: 1) a manual scanning of leading journals in management, international business, information systems, and business communications; 2) a search of several electronic databases using an extensive list of relevant terms (i.e. virtuality, virtualness, virtual); 3) a search of proceedings of international academic conferences (e.g.,

AOM, SIOP, INGroup); and 4) a scan of the reference lists from the articles identified through the first three methods.

#### Research/Practical Implications

By conducting this literature review, the intent is to identify the best practices of conceptualizing, measuring, and conducting research involving team virtuality.

#### Originality/Value

This review will provide a thorough review of the team virtuality literature – a literature stream that has not been sufficiently reviewed in the last decade. In so doing, the hope of this review is to identify the best of what has been done to date, and to provide recommendations for research going forward.

### **Trust repair and cultural context in global virtual collaboration**

*Sirkka L. Jarvenpaa (Univ. of Texas at Austin, McCombs School of Business, US)*  
[sirkka.jarvenpaa@mcombs.utexas.edu](mailto:sirkka.jarvenpaa@mcombs.utexas.edu), Elizabeth Keating (Univ. of Texas at Austin, McCombs School of Business, US)

#### Purpose

The research examines global virtual teams where English is used to carry on business interactions. How “common language” is used actually differs significantly across groups, due to diverse underlying cultural practices. We examine trust repair strategies and the effectiveness of character and role based strategies.

#### Design/Methodology

Over 3 years, we conducted ethnographic, longitudinal studies of 4 different global engineering teams – different onshore and offshore partnerships. We analyze two projects in depth. Both involved 6-8 months of data collection in both cases; extended visits locations. We analyzed weekly conference calls, as well as model review meetings and interview data

#### Results

Information and communication technology often becomes important monitoring devices but also centralize communication and create false expectations of similarity, creating difficult cultural and communication misunderstanding, and leading to trust asymmetries. We find incidents of both character and role based trust repair. Character repairs address cultural understanding of habits of perception of self and other, humor, cultural history. Role repairs focus on clarifying cooperation and collaboration agreements. While we find that role based trust repair can be effective; character based trust repair seldom is. .

#### Research Implications

The research highlights how communication and culture deepens trust asymmetries and illustrates effective and ineffective trust repair strategies.

#### Originality

In global virtual teams, addressing conflicts and problems in cross cultural collaboration typically focus on either communication or culture, but rarely look at how the two are related, and what this relatedness means in terms of solving or avoiding misunderstandings and repairing trust.

### **Knowledge, skills, abilities and other characteristics (KSAOs) for virtual teamwork**

*Stefan Krumm (Univ. of Münster, DE)*  
[stefankrumm@uni-muenster.de](mailto:stefankrumm@uni-muenster.de), Guido Hertel (Univ. of Münster, DE)

#### Purpose

Digitalization and globalization of business processes create new challenges for workers today and tomorrow, in particular as members of “virtual teams”. A pivotal question in this context is: Which KSAOs are required in virtual teamwork? To date, systematic job analyses on virtual teamwork are rare. This paper pre-



sents two job analyses as well as a research model outlining complementary approaches in identifying requirements of virtual teamwork. Specifically, the model posits that results of job analyses are moderated by dimensions of virtuality (e.g., that higher reliance on virtual tools requires higher cognitive skills).

#### Design/Methodology

Members of traditional and virtual teams (Study 1;  $N=216$ ) were surveyed. KSAO requirements in virtual teams were identified by comparing ratings from both team types. Dimensions of virtuality were applied to explain differences in team member ratings. This approach was repeated in cross-cultural settings as another dimension of team virtuality (Study 2;  $N=171$ ).

#### Results

Results confirm the general assumption that KSAO requirements are moderated by dimensions of virtuality. Whereas the relevance of cognitive skills and computer literacy was contingent on the extent of reliance on virtual tools, dependability and task planning defined particular requirements in cross-cultural virtual teams.

#### Research/Practical Implications

A literature review along the lines of our model highlights specific avenues for further job analyses explicitly considering different dimensions of virtuality. Practitioners might analyze specifics of a team's virtuality before staffing it.

#### Originality/Value

This paper is the first to present job analyses on virtual teamwork along the lines of a theoretically derived model.

### **Norms in virtual work: The impact of status and perceived norm violations in email communications**

*Carolyn Axtell (Univ. of Sheffield, UK) [C.M.Axtell@sheffield.ac.uk](mailto:C.M.Axtell@sheffield.ac.uk), Karin S. Moser (Univ. of Sheffield, UK), Janet McGoldrick (Univ. of Roehampton, London, UK)*

#### Purpose

Digitalization and globalization of business processes create new challenges for workers today and tomorrow, in particular as members of "virtual teams". A pivotal question in this context is: Which KSAOs are required in virtual teamwork? To date, systematic job analyses on virtual teamwork are rare. This paper presents two job analyses as well as a research model outlining complementary approaches in identifying requirements of virtual teamwork. Specifically, the model posits that results of job analyses are moderated by dimensions of virtuality (e.g., that higher reliance on virtual tools requires higher cognitive skills).

#### Design/Methodology

Members of traditional and virtual teams (Study 1;  $N=216$ ) were surveyed. KSAO requirements in virtual teams were identified by comparing ratings from both team types. Dimensions of virtuality were applied to explain differences in team member ratings. This approach was repeated in cross-cultural settings as another dimension of team virtuality (Study 2;  $N=171$ ).

#### Results

Results confirm the general assumption that KSAO requirements are moderated by dimensions of virtuality. Whereas the relevance of cognitive skills and computer literacy was contingent on the extent of reliance on virtual tools, dependability and task planning defined particular requirements in cross-cultural virtual teams.

**Research/Practical Implications**

A literature review along the lines of our model highlights specific avenues for further job analyses explicitly considering different dimensions of virtuality. Practitioners might analyze specifics of a team's virtuality before staffing it.

**Originality/Value**

This paper is the first to present job analyses on virtual teamwork along the lines of a theoretically derived model.

**Decision-making in virtual teams using emerging technologies**

*Marko Hakonen (Aalto Univ. School of Science, vmWork, FI) [marko.hakonen@aalto.fi](mailto:marko.hakonen@aalto.fi), Emma Nordbäck (Aalto Univ. School of Science, vmWork, FI)*

**Purpose**

In a recent review of group studies in virtual environments (VEs) it was noted that studies rarely consider VEs as media for virtual teams (VTs) and that they often lack covering theoretical framework (Sivunen & Hakonen, 2011). As a response to this, we conducted a laboratory experiment on decision-making in VTs drawing on robust theorizing.

**Design/Methodology**

The 2\*2 design compared the effects of group identification (individual vs. group prime) and technologies (VE vs. web conference; WEC) on decision quality (DQ) in VTs (24 teams). Moreover, qualitative analysis of the recorded interaction during decision-making sessions was used to find success factors of decision making process.

**Results**

As hypothesized, drawing on social identity approach we found that individual prime improved DQ as compared to group prime. However, contrary to our hypothesis based on media synchronicity theory VE was not better but equal to WEC in terms of DQ. In qualita-

tive analysis we found a success factor of DQ which was related especially to information processing. As this factor was quantified and added to ANOVA the main effect of identity on DQ remained but regression analysis revealed that the positive effects of identity (individual) on DQ were fully mediated by the information processing factor.

**Research/Practical Implications**

The study demonstrated the importance of individual, critical thinking and information processing in VT decision-making. Moreover, the qualitative analysis suggested some limitations of expected synchronicity gains in VEs.

**Originality/Value**

Our multi-method study shed new light on decision-making in VTs using emerging technologies.

**Getting a Seat at the Table: Strategic Communication and I/O Psychology*****SIOP-IAAP-EAWOP Alliance Symposium******Speakers:***

*Barbara Kozusznik (Univ. of Silesia, PL) [barbara.kozusznik@us.edu.pl](mailto:barbara.kozusznik@us.edu.pl), Richard Griffith (Florida Institute of Technology, US), Fernanda Afonso (GE Australia & New Zealand), Angela Carter (Univ. of Sheffield, UK), Hennie Kriek (TTS-Top Talent Solutions, ZA), Ute Schmidt-Brasse (PSYCON Business Consultants, DE), Mare Teichmann (Tallinn Univ. of Technology, EE)*

**Purpose**

The goal of the proposed panel discussion is to bring together a highly experienced and well-respected group of international academics, practitioners, and executives to discuss how organizational psychologists can improve their strategic communication. A long running concern in organizational psychology is the divide between academic researchers and practi-

tioners (Briner & Rousseau, 2011; Sackett, 1994). Anderson, Herriot, and Hodgkinson, (2001) suggested that this fragmentation in our discipline may be due to differences in focus of key stakeholders. Academics are largely beholden to editors of scientific journals who move the field towards what Anderson et al. refer to as "Pedantic Science" (pg. 496). Practitioners on the other hand must answer to clients which Anderson et al. suggested push us towards "Popularist Science" which examines relevant issues but with such disregard for rigor that is often viewed as "junk science" (pg. 393). Unfortunately, academic-practitioner debate in the field has recently been reduced to more name calling than collaborative problem solving (see recent issues of *The Industrial Psychologist*)

#### Controversial Perspectives

If the difference between academics and practitioners can be described as a divide, then the gap between organizational psychologists and executives, policy makers, and global leaders may be characterized as a chasm. While recent advances have moved the field forward (e.g. Psychology Coalition at the United Nations), organizational psychology lags behind other disciplines in terms of influence. The often heard retort to this existential angst is that organizational psychology is poorly understood; that decision makers don't understand what we can do for them...that we could help solve problems if we could only get a seat at the table. Some suggest that our lack of influence comes from a deficit in evidence-based practice (Briner & Rousseau, 2011). However a simpler explanation exists. While academics and practitioners may quarrel over who is more advanced, at least the two camps speak the same language (perhaps with different dialects). However, organizational psychologists do not use the vernacular of those decision makers that they wish to influence. This lack of strategic vocabulary and basic understanding of business outcomes puts

organizational psychologists at a disadvantage when the conversation turns to strategy and policy. We are like the wallflowers at a high school dance. The decision makers tolerate our company, but cannot take us seriously because of our perceived lack of skill and sophistication.

#### Implications for Research/Practice

If organizational psychology is to be influential in the problem solving of the 21st century we must do a few things. First, we must get out of the weeds, and gain a broader view of the field. This will require a rededication to macro-organizational issues, rather than the relatively steady focus on micro-issues. Second we must understand important business and societal issues through the lens of key stakeholders. Lastly, we must translate our science into the language of those stakeholders, so we may effectively communicate how our problem solving technology has value. As suggested by Boudreau and Ramstad (1999), organizational psychology must take a more strategic perspective, looking beyond individual-level outcomes and focus on integrated solutions that are meaningful in the eyes of decision makers.

#### Invited Panel Discussions

### Meet the Editors: Everything You've Always Wanted to Know about Publishing and Reviewing

Session Chair: *Frederick Phillip Morgeson (Michigan State Univ.)* [morgeson@msu.edu](mailto:morgeson@msu.edu)

For research to be visible to interested readers, it is important for it to be published in a top journal outlet that is also the best fit. Yet, many people wonder what is involved in getting their research published in the top outlets

in the field and may struggle with understanding which journals are the best fit for their work.

The purpose of this panel discussion is for conference participants to meet the editors of several top-tier journals in the field of Work and Organizational Psychology and learn more about the journal submission and review process. As a panel discussion, this session will be open, informal, and participative. The session will start with each editor offering a brief (3-5 minutes) introduction to their respective journal. Following this, we will open it up to audience questions. Issues addressed are likely to include the following:

1. Submission “flow” issues. For example, how many papers are submitted annually? How many papers are accepted?
2. Types of papers. Does the journal focus on empirical papers or theory pieces? Which journals publish papers on the development of measures?
3. Characteristics of an “ideal” paper. For empirical studies, this would include design and sample issues, including laboratory versus field methodology. Also, what are the expectations in terms of theoretical and practical contributions? What are the characteristics of a strong review paper?
4. Common mistakes authors make. For example, what are the common but correctable mistakes authors make? What are the most common “fatal flaws” in a manuscript?
5. Review process. How many reviewers review each paper? How long is the typical review process? When a paper is accepted, how long does it take to be published?
6. What can reviewers do? What characterizes a helpful review from the standpoint of an editor and an author?

This session will be driven by the interests of those who attend. This is a session where everyone should feel comfortable and “safe” to ask what they’ve always wanted to know about the journal submission process.

This session will include editors and associate editors from some of the top international journals in Work and Organizational Psychology:

- European Journal of Work and Organizational Psychology, Ramón Rico, Universidad Autónoma de Madrid, Editor.
- Journal of Applied Psychology, Tammy Allen, University of South Florida, Associate Editor.
- Journal of Management, Donald Truxillo, Portland State University, Associate Editor.
- Journal of Occupational and Organizational Psychology, Jonathon Halbesleben, University of Alabama, Editor
- Journal of Personnel Psychology, Rolf van Dick, Goethe University, Editor
- Personnel Psychology, Frederick Morgeson, Michigan State University, Editor

*Panelists:*

*Tammy Allen (Univ. of South Florida) [tallen@mail.usf.edu](mailto:tallen@mail.usf.edu), Jonathon Halbesleben (Univ. of Alabama), Ramón Rico (Universidad Autónoma de Madrid), Donald Truxillo (Portland State Univ.), Rolf van Dick (Goethe Univ.)*

## How do we want to publish tomorrow? The future of academic publishing in work and organizational psychology

Session Chair: *Rob Briner (Univ. of Bath, UK)*  
[r.b.briner@bath.ac.uk](mailto:r.b.briner@bath.ac.uk)

### Purpose

The aim of this panel discussion is to consider some of the central challenges and opportunities facing academic publishing in work and organizational psychology (WOP) over the next decade. Panel members will consist of key stakeholders in the publishing process, including publishers, editors, authors and practitioners, who will present what they see as some of the most important issues from their perspectives. The views of audience members will also be sought on these and additional questions such as: What is the purpose of academic publishing? What are the possible costs and benefits of Open Access? How can the impact and quality of published work be assessed? What are the effects of ratings of rankings of journals? How useful is the impact factor of a journal as an indicator of impact? How can the publishing process help practitioners keep up-to-date with research findings? What are the roles of books versus peer-reviewed journals? What value do publishers add to the publishing process? Given WOP is an applied field of psychology how can the implications of academic research for practice and practice and practitioner perspectives be incorporated? How easy is it for practitioners to both access and understand academic articles in WOP? How can publishing become more interactive and engaged with readers and users? Why are journals publishing articles with an increasingly higher proportion of statistically significant positive results? Why is it generally not possible to publish replications in WOP? What alternatives are there to the 20-30 page journal article as a format for publishing and communicating

research findings? Such questions have particular relevance now as information and communication technologies are changing both what is possible in publishing but also the expectations of readers and users about what publishing should deliver.

### Controversial Perspectives

Academics' careers success depends heavily on publishing certain types of output (journal articles) in certain types of journals (those highly rated with high impact factors). How else can and should academics publish and disseminate their research? Publishers are anxious to ensure they continue to add value to the publishing process and are viable as commercial enterprises in the context of Open Access and online publishing. What are the new roles for publishers? Practitioners and users of research may feel that traditional publishing outputs (journal articles) are difficult and expensive to obtain and of very limited use in their work if they wish to practice in an evidence-based way. How can they get access more easily to more relevant research?

### Implications for Research/Practice

This panel discussion will suggest ways in which the publishing process could be adapted and changed to better meet the sometimes competing demands of academics, publishers and research users.

### Panelists:

*Rob Briner (University of Bath, United Kingdom)*  
[r.b.briner@bath.ac.uk](mailto:r.b.briner@bath.ac.uk), *Tammy Allen (University of South Florida, USA)*, *Rob Dimpleby (Hogrefe Publishers)*, *Stefan Einarson (Springer Science + Business Media)*, *Victoria Gardner (Taylor & Francis Group)*



## Symposia

## Experimental Industrial Psychology IX: Affective Computing

Session Chair: *Sebastian Schnieder (Univ. of Wuppertal)* [s.schnieder@uni-wuppertal.de](mailto:s.schnieder@uni-wuppertal.de)

### State of the Art

In times of flexible working hours and compacted workload a more enhanced and effective handling with stress factors attaches rising value to limit the negative consequences for health, security, efficiency and the general quality of live.

### New Perspective/Contribution

To avoid chronic exhaustion and reduced working ability it is necessary to reduce the duration and the intensity of exposure and moreover to increase the duration and intensity of recovery.

### Conclusion and Implications for Research/Practice

This workshop should illustrate sources of exhaustion, accessory symptoms, measurement instruments for recovery sleepiness and as well as immediate countermeasures.

## Presentations of the Symposium

### Thermographic detection of stress in simulated job interviews

*Sascha Datkiewicz (Univ. of Wuppertal)* [s.datkiewicz@uni-wuppertal.de](mailto:s.datkiewicz@uni-wuppertal.de), *Jarek Krajewski (Univ. of Wuppertal)*, *Sebastian Schnieder (Univ. of Wuppertal)*

The measurement of stress through non-invasive techniques can be used in a number of problems regarding to human factors and can assist human resources departments in the personnel selection process. One possible

technique for the development of mental workload monitoring systems is the thermographic analysis of facial temperatures, especially changes in surface temperature in the regio frontalis, regio buccalis/infraorbitalis, as well as the glabella region, which are all promising indicators of stress. The peripheral-vasodilation of human skin is caused by the release of adrenaline and nor-adrenaline from the adrenal medulla. This release is controlled by hypothalamus and limbic system. The advantage of thermal stress measurement lies in the fact that stress is controlled by the autonomic nervous system, and is therefore, less susceptible to conscious manipulation. Based on this knowledge, a laboratory experiment was executed, during which, stress was induced through a simulated job interview (Trier Social Stress Test). The results showed significant stress induced changes of surface temperatures in various facial regions.

### EEG based sleepiness estimation – Comparison of two new methods

*Martin Golz (Univ. of Applied Sciences, Schmalkalden)* [m.golz@fh-sm.de](mailto:m.golz@fh-sm.de), *David Sommer (Univ. of Applied Sciences, Schmalkalden)*, *Udo Trutschel (Circadian Inc.)*, *Dave Edwards (Caterpillar Inc.)*, *Jarek Krajewski (Univ. of Wuppertal)*

### Purpose

Several authors investigated EEG during sleepiness and proposed alpha and/or theta rhythms as important markers, whereas other authors observed broad-band increases of EEG power during sleepiness. Recently, two new concepts were proposed: alpha burst (AB) and microsleep (MS) density.

### Design/Methodology

10 young adults participated in overnight driving simulations. Both patterns, AB and MS, were detected automatically from EEG recordings. Their accumulated length across an averaging interval of 1 minute is defined as AB and MS density.



### Results

MS density reveals a clear time-since-sleep as well as a clear time-on-task effect, whereas AB density did not. Only MS density correlated strongly to subjective self-ratings of sleepiness on the Karolinska sleepiness scale and to the objective driving performance measure, the standard deviation of lateral position of the vehicle in lane.

### Limitations

Results are restricted to simulated driving in the lab where strong sleepiness can be investigated. Low or mid range fatigue on the real road might have other characteristics.

### Research/Practical Implications

Devices monitoring driver fatigue absolutely have to warn in case of sleepiness crises. MS density has the potential to establish a gold standard for testing and validating such devices.

### Originality/Value

The automatic search for discrete specific events in the EEG is a new kind of quantitative EEG analysis with very high time resolution and potential for strict relations to behavioral events like drift-out-of-lane events. MS density is a novel concept promising to be sensitive and specific to sleepiness.

### Errors, aging and personality: An event-related potential (ERP) approach

*Sven Hoffmann (Leibniz Research Centre for Working environment and Human Factor) [shoffmann@ifado.de](mailto:shoffmann@ifado.de), Edmund Wascher (Leibniz Research Centre for Working environment and Human Factor), Michael Falkenstein (Leibniz Research Centre for Working environment and Human Factor)*

The monitoring of one's own actions is essential for adjusting behavior. In particular, response errors are important events that require behavioral adjustments. Correct and incorrect responses, as well as feedback to

responses, are followed by brain activity originating mainly in the anterior cingulate, which can be measured with event-related potential (ERP) techniques: each response is followed by a small negativity (Nc or CRN) in the ERP, which is strongly enhanced in incorrect trials (Ne or ERN). These neurophysiological correlates of response monitoring and evaluation can be classified even on the single-trial level in the EEG and thus can be utilized to distinguish between correct and erroneous actions online. Furthermore, because of their neurophysiological implementation they contribute even to research questions dealing with the relation of cognitive control and aging, as well as personality traits. The present talk summarizes and aims to integrate recent research about these topics.

### Analysing keyboard strokes and mouse movement pattern to detect sleepiness at regular PC-work

*Stefan Ungruh (Univ. of Wuppertal) [s.ungruh@image-management.net](mailto:s.ungruh@image-management.net), Jarek Krajewski (Univ. of Wuppertal), Florian Eyben (LMU Munich (DE), Human-Machine-Interaction), Bjoern Schuller (LMU Munich (DE), Human-Machine-Interaction)*

### Purpose

Fatigue conditions in HMI can be a significant safety or comfort risk. The presented measurement approach uses the direct interaction of computer input devices to detect drowsiness.

### Design/Methodology

In four sessions 30 test persons were observed in simulated computer activity within one test night. Prerequisite for the test person's participation was a consciousness of at least 15 hours. Each session consisted of a series of different experiments. These began after a first explanation at 8.00 PM and ended at 4.00 AM to capture a large range of fatigue stages. The sessions were interrupted by two

short and one big break with activation. The reference fatigue was measured by self- and external assessment on the KSS, pulse measurements and with the Compensatory Tracking Task. The third view is based on the assessment by two experienced test leaders.

#### Results

Besides artificial tracking tasks and standard tasks of PC use, such as text editor and internet research tasks were carried out. Changes within keyboard and mouse interaction are apparent particularly in a reduced total activity, increased data correction, extended dwell time and clicking period - both for mouse and keyboard.

#### Limitations

Even if changes in user's behavior were detectable the underlying data set of only 30 test persons was too small for significant predicates on the single users sleepiness. However intrapersonal stages of sleepiness are derived.

#### Research/Practical Implications

Future research should deal with task-specific pattern recognition-based fusion of the observed characteristics of the individual operating behavior concerning a total drowsiness value.

## Individual Strengths at the Workplace

Session Chair: *Marianne Van Woerkom (Tilburg Univ.)* [m.vanwoerkom@uvt.nl](mailto:m.vanwoerkom@uvt.nl)

Facilitator: *Arnold B. Bakker (Erasmus Univ. Rotterdam)* [bakker@fsw.eur.nl](mailto:bakker@fsw.eur.nl)

#### State of the Art

The benefits of both possessing and using personal strengths have been investigated in the context of positive psychology research. Existing studies have, however, focused mostly on having rather than using strengths and made use of student or local community samples. The hypothesis that using strengths leads

to better performance and steeper learning curves, has hardly been investigated in the context of the workplace. Moreover, little is known about how organizations can support their employees in using their strengths more often.

#### New Perspective/Contribution

The papers of this symposium represent an important contribution to the emerging literature. Two papers developed and tested new scales measuring the applicability of character strengths at work, the extent to which employees proactively use their strengths and improve their deficits, and their perceived organizational support for strengths use and deficit improvement. The three other papers make use of advanced research designs (such as field experiments and a weekly diary study) to investigate the predictors and effects of strengths identification and use in the workplace.

#### Conclusion and Implications for Research/Practice

Empirical evidence supporting the supposed beneficial effects of applying positive psychology principles to the workplace is still sparse, which may inhibit practitioners to implement these practices more often. The papers in this symposium support the positive psychology claim that strengths use leads to improved well-being and improved performance with empirical evidence. Furthermore, by developing scales for strengths use and deficit improvement, one of the papers sets an important stepping stone that enables future researchers to compare the benefits of strengths use to deficit improvement.

### ***Presentations of the Symposium***

### **Organisational and individual orientation towards strengths use and deficit improvement: Development and validation of a new questionnaire**

Marianne Van Woerkom (Tilburg Univ.) [m.vanwoerkom@uvt.nl](mailto:m.vanwoerkom@uvt.nl), Crizelle Els (North West Univ.), Karina Mostert (North West Univ.), Ian Rothmann (Afriforte), Arnold Bakker (Erasmus Univ. Rotterdam)

#### **Purpose**

There are no studies that investigate the extent to which employees proactively use their strengths and improve their deficits, and the extent to which they perceive organizational support for strengths use and deficit improvement. The purpose of this study was to develop and validate the Strengths Use and Deficit Improvement Questionnaire (SUDIQ).

#### **Design/Methodology**

The items of the questionnaire was generated and refined, where after a pilot study was conducted amongst 241 respondents. This was followed by a validation study amongst a heterogeneous convenience sample (N=699). Confirmatory factor analysis (CFA) was used to confirm the factor structure of the SUDIQ.

#### **Results**

The results confirmed the hypothesised four factor structure of the SUDIQ. The four factors were perceived organisational support for strengths use, perceived organisational support for deficit improvement, employees' strengths-oriented behaviour and employees' deficit improvement-oriented behaviour. The SUDIQ has proven to be a reliable and valid instrument in the South African context.

#### **Limitations**

The SUDIQ was validated amongst a relatively small sample size in one country (South Africa), necessitating future research to explore the validity of the questionnaire amongst larger samples and in other countries.

#### **Research/Practical Implications**

The results from this study allow future research to validly and reliably measure strengths use and deficit improvement by both the organisation and the individual.

#### **Originality/Value**

The SUDIQ is currently the only questionnaire that includes scales for proactive behaviour regarding strengths use and deficit improvement in the workplace, and perceived organizational support for strengths use and deficit improvement.

### **Making strengths work: A weekly diary study on the predictors and outcomes of strength use in the workplace**

Marianne Van Woerkom (Tilburg Univ.) [m.vanwoerkom@uvt.nl](mailto:m.vanwoerkom@uvt.nl), Wido Oerlemans (Erasmus Univ. Rotterdam) Arnold Bakker (Erasmus Univ. Rotterdam)

#### **Purpose**

Although the link between the use of strengths and well-being is a key aspect of positive psychology's research agenda, this relationship has hardly been tested in the work context. The aim of this paper is to shed more light on predictors and outcomes of strengths use in the workplace.

#### **Design/Methodology**

Sixty-five civil engineers completed a general questionnaire and a weekly diary regarding strengths use support, strengths knowledge, strengths use, and several positive work outcomes over 6 consecutive weeks. Hypotheses were tested by controlling for previous week scores (lagged effects) of the dependent variables in order to predict weekly change in outcomes.

#### **Results**

Multi-level analyses showed that higher strengths use support and strengths knowledge led to more weekly strengths use among employees. In turn, weekly strengths use predicted significant change in a range of

positive outcomes (e.g. self-efficacy, engagement, and affective commitment) on a within-person level. Moreover, strengths use mediated direct and positive effects of strengths support on weekly changes in positive outcomes.

#### Limitations

Although we had sufficient statistical power, main limitations of this study are the use of self-reports and the relatively small sample size.

#### Research/Practical Implications

The findings imply that strengths use is indeed beneficial for employees and organizations, and that organizations can help employees to use their strengths more often by providing strengths support.

#### Originality/Value

This study is one of the first to investigate predictors and outcomes of strengths use in the workplace using a repeated measures, longitudinal design.

### **Theoretical background, operationalization, and first results on the role of character strengths-related person-job fit**

*Claudia Harzer (Univ. of Zurich)*  
[c.harzer@psychologie.uzh.ch](mailto:c.harzer@psychologie.uzh.ch), *Willibald Ruch (Univ. of Zurich)*

#### Purpose

We investigated the hypothesis that the amount of positive experiences at work (i.e., job satisfaction, pleasure, engagement, meaning) and calling is a function of the extent to which the situational circumstances at work allow for the application of an individual's highest character strengths.

#### Design/Methodology

In two studies (N1 = 1'111; N2 = 111) participants completed measures for character strengths as traits, the applicability of character strengths at work, and positive experienc-

es at work. In study 2 participants additionally completed a calling measure and their co-workers (N = 111) judged the applicability of character strengths at work.

#### Results

Both studies showed that the fit between an individual's character strengths and those sought by job tasks and norms at work is positively related to the degree of positive experiences. The application of four and more of the highest strengths yielded the highest scores in positive experiences. Additionally, study 2 showed, only those applying four or more of their character strengths described their jobs as a calling. Finally, results showed, the effect of strengths-related person-job fit on calling is partially mediated by positive experiences.

#### Research/Practical Implications

In the light of the two studies, a positive workplace is one that fosters the individuals' character strengths (i.e., allows for their application) and consequently facilitates positive experiences and calling.

#### Limitations

Longitudinal or intervention designs are needed to test this causality.

#### Originality/Value

To the knowledge of the authors, these studies are the first ones showing the role of strengths-related person-job fit for positive experiences and calling.

### **The effect of a strengths-based intervention on employee well-being, psychological capital, engagement, and commitment**

*Christina Meyers (Tilburg Univ.)*  
[m.c.meyers@uvt.nl](mailto:m.c.meyers@uvt.nl), *Marianne Van Woerkom (Tilburg Univ.)*

#### Purpose

The aim of this paper is to investigate the effects of a strengths-based intervention –

which focuses on indentifying individual talents and stimulating their subsequent development and use - on employee's well-being, psychological capital, work engagement, and commitment.

#### Design/Methodology

In order to investigate the effects of the intervention, about 100 participants working in different companies from different sectors are randomly assigned to an intervention group and a waitlist-control group. The study variables are assessed at three different points in time (pre, post and 1-month follow-up) by means of online questionnaires.

#### Results

Results are not yet available.

#### Limitations

The main limitation of the study is the rather small sample size of about 100 participants divided up into intervention and control-group. For future studies, it would also be advisable to investigate the effects of a strengths-based intervention on objective measures of performance.

#### Research/Practical Implications

Strengths-based interventions seem to be a valuable and cost-effective tool to enhance employee well-being and performance. If those interventions proof to be effective, they might challenge traditional views on Human Resource Management (HRM) which both tend to focus on gaps in an employee's knowledge, skills, and abilities and the closing thereof.

#### Originality/Value

Empirical research which investigates the effects of strengths-based interventions in organizations has been lacking so far. But since theory suggests that those interventions have highly positive effects for employees as well as employers it is indispensable to investigate whether this can be corroborated by data.

## Experimental Industrial Psychology VI: Mental Workload in Human-Machine-Interaction

Session Chairs: *Achim Leder (Univ. of Wuppertal)* [a.leder@uni-wuppertal.de](mailto:a.leder@uni-wuppertal.de), *Matthias Rötting (TU Berlin)* [roetting@mms.tu-berlin.de](mailto:roetting@mms.tu-berlin.de)

#### State of the Art

Determining workload helps to quantify the mental cost of performing tasks in order to predict operator and system performance. As such, it is an interim measure and one that should provide insight into where increased task demands may lead to unacceptable performance.

#### New Perspectives/Contributions

Detecting workload in an objective and unobtrusive way in daily life settings may open several fascinating perspectives for psychological research. We give a review on present and newly developed performance-based, subjective, and physiological or biochemical approaches to the research field of mental workload highlighting their application potential for research and daily life settings.

#### Research/Practical Implications

The ultimate aim of mental workload measurement is to improve working conditions, intuitive workstation design, or more effective procedures. Further, legal obligations might be a good reason to measure workload. Workload measurement during the assessment of new user interfaces may be a requirement in order to attain certification for use; for example, certification of new aircraft cockpit designs. Moreover, instruments for laboratory use help to shade light on fundamental principles of mental workload processes.

### ***Presentations of the Symposium***

**Detecting mental workload from phonetic speech changes in driver-codriver talk**

Tom Laufenberg (Univ. of Wuppertal) [t.laufenberg@uni-wuppertal.de](mailto:t.laufenberg@uni-wuppertal.de), Klaus Reinprecht (TU Braunschweig, Ingenieurs- und Verkehrspsychologie), Jarek Krajewski (Univ. of Wuppertal)

**Purpose**

This study examined the influence of mental workload on phonetic speech parameter. The ultimate aim of this approach is to estimate mental workload from driver speech.

**Design/Methodology**

In a within-subject driving simulation study (N = 33) the driving task difficulty (and thus the mental workload) was manipulated on two levels, which were varied in a balanced way. The drivers were given the instruction to have small-talks with their co-driver during the total driving task (total speech corpus: 5:39 h). Speech changes were measured by capturing articulation, prosody and speech quality features.

**Results**

The results showed that high mental workload is associated with more frequent changes of voiced and unvoiced frames and a more monotonous Intonation contour. Multivariate classification models confirmed the significant detection accuracy of the total feature set used.

**Limitations**

The ecological validity was reduced by the simulator setting and the instructed speech task. The generalization to other dialects and even languages remains open. Moreover, the small sample size limits further gender specific analysis. Furthermore, dialog, syntax, and semantic information were taken into consideration.

**Research/Practical Implications**

This study showed that estimating mental workload from speech characteristics might be a promising approach, which could provide

useful information for workload specific adaptation of driver assistant systems.

**Impact of LED-technology on comfort and emotion in long haul-flights – Psychophysiological analysis of the use of activating light in the aircraft-cabin**

Achim Leder (Univ. of Wuppertal) [a.leder@uni-wuppertal.de](mailto:a.leder@uni-wuppertal.de), Jarek Krajewski (Univ. of Wuppertal), Sebastian Schnieder (Univ. of Wuppertal)

**Purpose**

The experience of comfort and positive emotions during a long haul-flight depends on many factors. In addition to seats, cabin climate, vibrations, turbulences and external influences on the flight, light in the aircraft cabin plays another important role. Chronobiologically improved cabin lighting concepts by new LED-(Light Emitting Diode)-luminaires might enhance passengers comfort on long-haul flights by higher in-flight relaxation and higher activation levels at the destination.

**Design/Methodology**

This study compares currently used cabin lighting with new technology based on LED. In the context of three simulated long-haul flights (within-subject-design: 21:00 – 07:00 h; N=32) comfort and emotion are measured by saliva-melatonin & -cortisol, self-reports, observer ratings and webcam based automatic facial expression analysis.

**Results**

The results show higher comfort and positive valence in the warm white LED condition.

**Driver Workload – A comprehensive study combining performance, subjective and physiological measures**

Stefan Ruff (TU Berlin) [stefan.ruff@mms.tu-berlin.de](mailto:stefan.ruff@mms.tu-berlin.de)



**Design/Methodology**

Thirty participants (male=15 and female=15) performed the Lane Change Task (LCT) at a fixed base driving simulator. Parallel to the driving task they completed the Paced Serial Auditory Addition Test (PASAT) in three conditions of varying degrees of difficulty.

**Results**

The collected data is presently being analyzed. First results hint to a sensitivity of the nose tip temperature to differentiate between high and low workload conditions.

**Limitations**

The experimental laboratory setting is highly artificial to minimize confounding factors. A transfer of the results to real-world driving conditions should be done with care.

**Research/Practical Implications**

Based on the results of this study, we aim to develop a real time workload measurement system with a high reliability.

**Originality/Value**

To our knowledge most studies so far concentrated on very few physiological measures. The present study combines several non-intrusive physiological measures in a synchronized manner.

### **The value of eyetracking measurements for the assessment of driver sleepiness**

*Martin Golz (Univ. of Applied Sciences, Schmalkalden) [m.golz@fh-sm.de](mailto:m.golz@fh-sm.de), David Sommer (Univ. of Applied Sciences, Schmalkalden), Udo Trutschel (Circadian Inc., Arlington MA, US), Dave Edwards (Caterpillar Machine Research, Caterpillar Inc., Peoria IL, US), Jarek Krajewski (Univ. of Wuppertal)*

**Purpose**

During the last two decades several third party solutions for monitoring driver's state were placed on the market. Among them eyetracking based systems are most promising. Their

value for sleepiness detection under ideal lab conditions is investigated and a comparison to electroencephalography (EEG) and electrooculography (EOG) is presented.

**Design/Methodology**

Overnight driving simulations of 23 young adults with time since sleep of at least 16 hours were performed. Recorded time series of pupil diameter, horizontal and vertical gaze location as well as of EEG and EOG were processed by adaptive signal processing methods and nonlinear discriminant analysis.

**Results**

Random subsampling cross validation revealed accuracies up to 75.8 %, 71.7 %, and 77.8 % from horizontal / vertical eye movements and pupil diameter respectively. All eyetracking signals together yielded 80.9 % and were inferior to EEG and EOG (83.3 %, 84.2 %). Fusion of all measurements was best (90.9 %).

**Limitations**

Analysis was restricted to visually observable episodes of overlong eyelid closures. In comparison to real road conditions driving simulations incorporate much less sources of disturbances. Therefore, the implications for real traffic are limited.

**Research/Practical Implications**

Industrial fatigue monitoring devices are evaluable by the methodology presented. Contactless eyetracking was evaluated in comparison to reference measurements.

**Originality/Value**

The evaluation is strictly directed to dangerous behavioral events and regrets averages over time spans of several minutes.

## Detection of mental workload through thermal imaging – A pilot study in real road traffic

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### Purpose

The continuous monitoring of mental workload can support the detection of comfort and safety-critical overload situations. For example, accurate monitoring could indicate that a driver is in need of support in instances of road traffic. One possible technique for the development of mental workload monitoring systems is the thermographic analysis of facial temperatures, especially changes in surface temperature in the regio frontalis, regio buccalis/infraorbitalis, as well as the glabella region, which are all promising indicators of mental workload status. The peripheral-vasodilation of human skin is caused by the release of adrenaline and noradrenaline from the adrenal medulla.

### Method

Based on this knowledge, a 20 minute car ride through urban traffic (N=10) was executed, during which, the mental workload of the driver was stimulated every 5 minutes and was varied in two steps by a task of mental arithmetic.

### Results

The results demonstrated a clear correlation between the increase of mental workload reported by the driver, and an increase of surface temperature in the associated regions of the face.

## Experimental Industrial Psychology IV: Human-Computer-Interaction

Session Chair: Jarek Krajewski (Univ. of Wuppertal) [krajewsk@uni-wuppertal.de](mailto:krajewsk@uni-wuppertal.de)

### State of the Art

In times of flexible working hours and compacted workload a more enhanced and effective handling with stress factors attaches rising value to limit the negative consequences for health, security, efficiency and the general quality of live.

### New Perspective/Contribution

To avoid chronic exhaustion and reduced working ability it is necessary to reduce the duration and the intensity of exposure and moreover to increase the duration and intensity of recovery.

### Conclusion and Implications for Research/Practice

This workshop should illustrate sources of exhaustion, accessory symptoms, measurement instruments for recovery sleepiness and as well as immediate countermeasures.

## ***Presentations of the Symposium***

### **Multi-methodological analysis of attention on websites**

Wiebke Mahlfeld (Leuphana Univ. of Lüneburg) [mahlfeld@leuphana.de](mailto:mahlfeld@leuphana.de), Rainer Hoeger (Leuphana Univ. of Lüneburg), Hanna Siemoneit (Leuphana Univ. of Lüneburg), Eva Baseler (Leuphana Univ. of Lüneburg)

### Purpose

The content of the internet increases continuously. Accordingly, websites have to compete for the user's attention. We studied different aspects of attention while looking on websites by a multi-method design. We focused on the benefit of physiological measurements for

evaluating the attention-capturing impact of websites. We hypothesized that websites which are rated of higher interest also arouse higher levels of physiological attention.

#### Design/Methodology

25 static websites were presented to three groups. Participants were asked to evaluate their interestingness. Physiological parameters of attention were measured in two groups with constant viewing time. In the first group the neuronal attention level was measured by a brainwave sensor. In the second group eye movements were recorded by video-based eye tracking. In a third group the arbitrary viewing time of each website was introduced as a further variable. Additionally, websites were evaluated by a gridded analysis of visual structure (VISATT; Höger, 2001). All data were averaged over participants and a correlation analysis was performed with websites as cases.

#### Results

Correlation analysis support the hypothesized relationship for eye movement data, subjective rating of interestingness and VISATT analysis. We found a negative correlation between the neuronal attention parameter and interestingness. Possibly the neuronal attention parameter reflects the difficulty of visual information processing instead of attention.

#### Limitations

A second study shows no correlation between neuronal attention parameter with established attention tests.

#### Research/Practical Implications

The usability of the brainwave sensor will be discussed.

#### Originality/Value

We attempt to replace subjective evaluations of interestingness of websites by physiological measures.

### **Computer-supported work in distributed and co-located teams: The influence of mood feedback**

*Andreas Sonderegger (Univ. of Fribourg) [andreas.sonderegger@unifr.ch](mailto:andreas.sonderegger@unifr.ch), Denis Lalanne (University of Fribourg), Fabien Ringeval (Univ. of Fribourg), Juergen Sauer (Univ. of Fribourg), Luisa Bergholz (ITB Consulting Bonn)*

#### Purpose

This article examines the influence of mood feedback on different outcomes of teamwork in two different collaborative work environments.

#### Design/Methodology

Employing a 2 x 2 between-subjects design, mood feedback (present vs. not present) and communication mode (face-to-face vs. video conferencing) were manipulated experimentally. We used a collaborative communication environment, called EmotiBoard, which is a large vertical interactive screen, with which team members can interact in a face-to-face discussion or as a spatially distributed team. To support teamwork, the tool provides visual feedback of each team member's emotional state. Thirty-five teams comprising 3 persons each (with a confederate in each team) completed three different tasks, measuring emotion, performance, workload, and team satisfaction.

#### Results

Results indicated that the evaluation of the other team members' emotional state was more accurate when the mood feedback was presented. Furthermore, mood feedback influenced team performance positively in the video conference condition and negatively in the face-to-face condition. Limitations: For this study, ad-hoc teams have been used. Results can therefore be transferred only with caution to longer lasting work groups.

#### Research/Practical Implications

The findings of this study are encouraging to continue our development of the EmotiBoard, a system that automatically detects and represents moods in team work. This is because understanding mood and emotions are - especially with regard to particular work situations such as intercultural teamwork - important within well-operating teams.

#### **Production ergonomics – Analysis methodology for human-system-integration in teamwork**

*Sigmund Schimanski (ERGOLabs GmbH Wuppertal)*  
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##### Purpose

Analysis of activities and information flows in the emergency services for the specification of safety and ergonomics-related demands on the equipment concept.

##### Design / Methodology

Conduct of the investigation steps and methods used: document analysis, structured interviews, focus groups, video observation, K<sup>3</sup>-modeling, expert interviews, process simulation, identify process weaknesses, deriving solutions.

##### Results

The structured and holistic approach of analysis can be reliably to identify vulnerabilities within activities and information flows. Suggestions developed for improvement can be partially validated in the simulation process and for further steps (laboratory and field tests) can be specified. Besides anthropometric improvement solutions of the used equipment we found bottlenecks especially in navigation processes. Through user-centered interviews led them to new solutions.

##### Limitations

The presented approach is based on the analysis of activities and information flows in

teamwork. Further steps to analysis based process design and evaluation, are not part of this paper.

#### Research / Practical Implications

In particular, the interface between the modeling method and process simulation represents a major challenge. Further research to reliable implementation process must be developed to facilitate the data transfer and avoid transmission errors.

#### Originality / Value

The use of methods proved itself in field and should be deepened in other neighboring questions of teamwork. Even in the context of industrial work activities, the use of the methods is considered helpful. Therefore, the relevant issues will be searched for further work.

### **Innovation Processes - Individual, Group, and Organizational Aspects**

Session Chairs: *Wolfgang Scholl (Humboldt Univ., Berlin)* [schollwo@cms.hu-berlin.de](mailto:schollwo@cms.hu-berlin.de), *Dawn L. Eubanks (Warwick Business School)*  
[Dawn.Eubanks@wbs.ac.uk](mailto:Dawn.Eubanks@wbs.ac.uk)

#### State of the Art

Innovations come into existence through intertwined processes at the individual, the group, and the organizational level. Psychologists mostly concentrate in their research on the individual level and somewhat on the group level whereas the organizational level is rarely researched. Even if the organizational level is addressed, it is usually individual organizational behavior. In our two symposia, we try to shed light on all levels.

#### New Perspective/Contribution

Symposium I starts with a model of new knowledge production encompassing all three levels in a differentiated way (Scholl). Thus, it opens the intended broad perspective for the following presentations and their interconnec-

tions. The individual work level is addressed in two contributions highlighting cognitive and motivational success factors for innovation interacting with task requirements and task conditions (Beudeker et al. / von der Weth et al.). Two further contributions concentrate on employee creativity under specific leader influence. (Hammond et al. / Eubanks & Friedrich). At the team level (to be continued in symposium II), an interesting simulation is developed and tested with which an optimal team composition for innovation projects can be established (Przybysz et al.).

#### Conclusion and Implications for Research/Practice

The view on innovation processes taking place at different system levels will further new insights and induce new research ideas. For practical purposes it is mandatory to keep all levels in mind (continued in symposium II). It will probably be a unique symposium (together with symposium II) in highlighting innovation research on all three system levels in organizations.

### ***Presentations of the Symposium***

#### **Differentiating the impact of knowledge processes on the success of single innovations and on the innovativeness of firms**

Wolfgang Scholl (Humboldt Univ., Berlin)  
[schollwo@cms.hu-berlin.de](mailto:schollwo@cms.hu-berlin.de)

##### Purpose

An overview of the innovation literature shows that the production of new knowledge needed for innovations takes place through individual, group, organization, and societal processes. Instead of concentrating on single processes like creativity, an integrated evolutionary model of knowledge production (extending Campbell, 1974) was developed, resulting in a novel innovation theory (Scholl, 2007). It encompasses trial-and-error learning,

observational learning, creative problem-solving, routinization, concept building, communication, visionary leadership, organizational decision-making, organizational networks, web 2.0 applications (and cultural, economic, scientific, and political processes not investigated here).

##### Design/Methodology

In a first study (online, 915 innovators), these different knowledge processes had a differentiated impact on the success of the focused innovations. In a second study (42 firms, 617 respondents) the innovation capability or innovativeness of firms was assessed through the reports of several employees on diverse innovations within each firm.

##### Results

It was basically confirmed that knowledge processes and the coordination capability were good predictors of innovativeness (> 50% variance explained). Coordination capability had the strongest weight and average creativity and visionary leadership expelled all other knowledge processes in the regression equation.

##### Limitations

The firm sample should be larger and more diverse.

##### Research/Practical Implications

The theoretical model and the empirical results are a valuable stimulation for further research and give useful hints for practioners.

##### Originality/Value

The theoretical model is unique, integrating research from psychology, sociology, and economics; the presented studies are the first ones.

## Regulatory task heterogeneity and the effects on employee regulatory focus

Dagmar A. Beudeker (TNO) [dagmar.beudeker@tno.nl](mailto:dagmar.beudeker@tno.nl), L. Dorenbosch (TNO), F. A. Rink (Univ. of Groningen), N. Ellemers (Univ. of Leiden), R. Blonk (TNO)

### Purpose

Organizational jobs consist either of tasks where employees need to achieve success (i.e. promotion tasks) or tasks where employees need to prevent mistakes (i.e. prevention tasks). The performance of these tasks can evoke a ditto regulatory focus in employees. We propose that employees in fact often cope with regulatory task heterogeneity (RTH). Because RTH demands a constant switching between task goals, it requires a flexible thinking style which is often related to innovative work behavior. However, due to this constant switching, RTH should also be associated with less task clarity and higher recovery time.

### Design/Methodology

N = 98 Dutch employees rated the existence of regulatory tasks in their job, task clarity and recovery time. Their personal regulatory focus was assessed through self-report and independent leader ratings.

### Results

As expected, most employees indicated that their job contained a mixture of regulatory tasks (79%), rather than just one dominant set. Regression analyses with a heterogeneity index confirmed that RTH was associated with a higher promotion focus, but also with lower task clarity and higher recovery time.

### Limitations

All results are correlational, so we cannot demonstrate the hypothesized direction of our effects.

### Research/Practical Implications

Creating regulatory heterogeneous jobs may advance innovative work behavior in employees. Yet, because of the associated unclarity

and a energy loss, people in RTH jobs should take proper time to rest after work.

### Originality/Value

We are the first to investigate the consequences of the sequential alteration of promotion and prevention oriented tasks for employees in organizations.

## The role of motivational and emotional processes in technical and organisational innovation projects

Rüdiger von der Weth (HTW Dresden, Wirtschaftswissenschaften) [weth@wiwi.htw-dresden.de](mailto:weth@wiwi.htw-dresden.de), Katrin Schubach (HTW Dresden, Wirtschaftswissenschaften), Rinat Saifouline (HTW Dresden, Wirtschaftswissenschaften)

### Purpose

Purpose of our work is the development of a model which describes the dynamic interaction between self-efficacy and individual emotional processes on the one hand and organizational and technical processes on the other hand. According to this model self energizing or stable feedback loops exist between individual emotional and motivational processes and the reactions of the whole work system, which influence the success of innovation projects.

### Design/Methodology

The contribution presents three case studies (medium sized companies, 30 to 180 employees). The methods were participant observation and semi-structured interviews. The authors developed a system to describe characteristics of "events" and "states" of innovation processes. This allows analysing typical sequences, escalation and effects on success. The reliability of this system is tested.

### Results

The analysis of resulting developments allows prognoses about the effects of implementation measures on the individual and the whole work system. Developing on this, a strategy



for software implementation is described which integrates the implementation of new technologies, qualification and communication strategy. Concrete measures to improve software specifications, business process description and learning material are added.

#### Limitations

The studies were conducted in medium-sized industrial companies with software implementation projects. Currently the approach is tested in the field of doctor's surgeries in the field of nuclear medicine.

#### Research/Practical Implications

Scientific goal of this research is the dynamic model of the processes described above. The practical impact should be an early warning system for innovation projects which detects psychological resources and problems and reduces the risk of failure significantly.

### **Leader emotional congruence in error feedback: The context of creativity**

*Michelle Hammond (Univ. of Limerick) [michelle.hammond@ul.ie](mailto:michelle.hammond@ul.ie), Dawn L. Eubanks (Warwick Business School), Thomas Hills (Univ. of Warwick)*

#### Purpose

The process of creativity is one that may be wrought with errors and mistakes. How individuals manage their emotions and motivations when committing errors is important for successful learning and creativity. For example, experiencing positive and activating emotions may promote the creativity process, whereas negative activating emotions such as fear or anxiety may decrease creativity. The process whereby individuals receive feedback may greatly influence their ability to persist despite errors in complex tasks such as learning and creativity. However, when leaders or other co-workers deliver feedback messages, there is the potential for incongruence between the valence of the message and non-

verbal emotional display. Incongruence when delivering feedback on errors may further diminish creativity. The purpose of this study is to examine emotional congruence feedback messaging in the context of a creative task.

#### Design/Methodology

University students (expected N=180) are participating in a 3x3 experimental design.

#### Results

We expect to find an interaction among the feedback valence and emotional display of feedback provider on creativity such that creativity is highest when individuals receive positive supportive feedback with a positive emotional display.

#### Limitations

Our study is limited in the generalizability of a controlled experiment.

#### Research/Practical Implications

Our findings have implications for the study of errors and creativity as well emotional displays of feedback providers.

#### Originality/Value

This study is one of the first to simultaneously address congruent affective displays of individuals providing feedback on errors while engaged in a creative task.

### **The influence of authentic leadership on creativity in traditional and entrepreneurial settings**

*Dawn L. Eubanks (Warwick Business School) [Dawn.Eubanks@wbs.ac.uk](mailto:Dawn.Eubanks@wbs.ac.uk), Tamara L. Friedrich (Savannah State Univ.)*

#### Purpose

Entrepreneurs are clearly creative in the development of their new venture. However, as they enter into a leadership role does the fact that they are serving as a role model of creative thinking result in greater employee creativity? Their Authentic Leadership may mod-

erate this relationship. Authentic leadership, itself, has been found to be positively related to creativity. Authentic leaders have a strong sense of who they are and their values and then transparently enact those values with others. Thus, we expect that authenticity in entrepreneurial leadership will enact creativity in their followers.

#### Design/Methodology

University students (expected N=80) are participating in a 2x2 between subjects experimental design in which they will perform a creative task delivered by a hypothetical leader. The independent variables are the leader's status as more/less authentic and as an entrepreneur or non-entrepreneur. Dependent variables are perception of authenticity, follower attitudes, and creative performance.

#### Results

We expect that entrepreneurial leaders will have followers that are more engaged and creative, and the effect will be strongest for authentic entrepreneurial leaders.

#### Limitations

Our study is limited in the generalizability of a controlled experiment.

#### Research/Practical Implications

Our findings have implications for understanding the difference between entrepreneurial and non-entrepreneurial leaders. This can allow for greater insight into entrepreneurial ventures and the nature of these "creative environments".

#### Originality/Value

This study is the first to explore the relationship between authentic leadership and follower creativity in the context of entrepreneurship.

### **Predicting team performance in innovative projects with artificial neural networks**

Philipp Przybysz (RWTH Aachen) [p.przybysz@iaw.rwth-aachen.de](mailto:p.przybysz@iaw.rwth-aachen.de), Sebastian Schneider (RWTH Aachen), Susanne Mütze-Niewöhner (RWTH Aachen), Christopher M. Schlick (RWTH Aachen)

#### Purpose

Successful innovation and Research & Development (R&D) projects are crucial for survival of companies in highly competitive industries. The greater part of these projects is realized by teams. One major constraining factor, which drives the composition of such teams, is the availability of qualified project personnel. In order to increase the likelihood of a successful outcome of innovation and R&D projects, this paper presents an approach which supports the manager's task of team composition. This approach allows a comparison and evaluation of all possible team configurations before the selection of a team for an upcoming project.

#### Design/Methodology

Based on a survey of 145 companies, data regarding innovation and R&D projects were gathered and subsequently divided randomly into a training and a test set. The training set was then used to train an Artificial Neural Network (ANN).

#### Results

The predictions of the ANN on the test set were fairly accurate; the mean deviation (on a 0 to 1 scale) of predicted from actual values was 0.155.

#### Limitations

In contrast to e.g. regression coefficients, ANNs, due to their architecture, only allow a very limited interpretation of the effects and mechanisms at hand.

**Research/Practical Implications**

The presented method enables practitioners to make an a priori evaluation of possible team constellations.

**Originality/Value**

This paper presents an approach originating from cognitive science, which has not been utilized before in the context of team composition for innovation or R&D projects.

## **Theoretical and Practical Advances in the Assessment of Cross-Cultural Competence**

Session Chairs: *William K Gabrenya (Florida Institute of Technology)* [gabrenya@fit.edu](mailto:gabrenya@fit.edu), *Richard L Griffith (Florida Institute of Technology)* [griffith@fit.edu](mailto:griffith@fit.edu), *Daniel McDonald (Defense Equal Opportunity Management Institute)* [docmcdonald321@bellsouth.net](mailto:docmcdonald321@bellsouth.net)

**State of the Art**

Cross-cultural competence (3C) has been defined as the ability to quickly understand and effectively act in a culture different from one's own (e.g. McDonald, et al., 2008). Despite the necessity to assess and develop 3C, there are major gaps in the theoretical understanding of 3C and the ability to adequately measure the construct. Although progress has been made (Johnston, et al., 2010), existing models of 3C are limited by: (1) imprecision in defining constructs, often in the absence of operationalization; (2) unsatisfactory distinctions among key model components such as antecedents, KSAs, and performance outcomes (Gabrenya et al., 2012); and (3) the absence of causal models that link antecedents, competencies, and performance. A serious drawback to assessment and model building is the poor quality of the mainly self-report instruments currently used in this field.

**New Perspective/Contribution**

The symposium papers will critically evaluate current theory and measurement frameworks

of 3C, suggest theoretical refinements of the 3C construct highlighting the nomological network of antecedents, competencies, and performance outcomes, multilevel approaches to 3C, competency learning, and alternative assessment methodology focusing on qualitative, implicit and behavioral measures.

**Conclusion and Implications for Research/Practice**

Improving the measurement of 3C will provide practitioners with more reliable and valid assessments of the construct that can better inform decisions such as personnel selection, classifications, and training evaluation. High quality measurement would facilitate the validation of scientific models of 3C and enhance researchers' tools for building better theories that inform decision and policymaking.

### ***Presentations of the Symposium***

#### **Methodological advances in assessing cross-cultural competence**

*William K Gabrenya (Florida Institute of Technology)* [gabrenya@fit.edu](mailto:gabrenya@fit.edu), *Marinus van Driel (Top Talent Solutions)*

**Purpose**

Cross-cultural competence (3C) and its assessment has attracted increasing attention as cross-nation interaction for business and other purposes increases. Gabrenya et al. (2012) identified three gaps in assessment of 3C: (1) absence of behavioral measures of 3C; (2) widespread use of self-report instruments; and (2) inattention to affective and emotional processes. The program of research reported here was undertaken to address the first two gaps.

**Design/Methodology**

A 3C measure was developed to as a behavioral, objectively scorable, online instrument. A cultural situational judgment test (SJT) was developed that required participants to per-

form under varying levels of cognitive load, implemented as a memory task. The SJT was embedded in a 15-month longitudinal study of international student adjustment and acculturation.

#### Results

SJT performance was found to be related to psychological adjustment and emotion regulation measures, and to conscientiousness, particularly in high load conditions. The R&D effort afforded an understanding of the parameters involved in creating measures of this kind and resulted in the development of a refined version of the SJT procedure.

#### Limitations

The narrow bandwidth of an SJT procedure performed under load, with respect the considerable breadth of the 3C domain, requires the development of additional behavioral measures before such instruments can supplant self-report measures.

#### Practical Implications and Value

Given the importance of assessing 3C and the cost of assessment centers, the development of “mini-assessment centers” such as the SJT procedure reported here would provide tools needed for selection, training, and theoretical development of 3C.

### **Individuals participating in diverse working environments: The role of personality**

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#### State of the Art

The purpose of this paper is to enhance our awareness of cross-cultural competence (3C). Positive and negative effects in diverse environments are typically analysed by categorical distinctions (e.g. gender, ethnic background, age groups). However, diversity also offers challenges to which individuals may react in

different ways. For some individuals, they are threatening, for others they only pose practical problems to be resolved, and for quite a few, diversity is a positive challenge and seen as something motivating. Personality psychologists have investigated the role of personality characteristics, such as self-efficacy, need for closure, sensation seeking, and the Big Five dimensions in challenging situations.

#### New Perspective/Contribution

In this paper, the primary results of these studies will be reviewed. These studies have not, however, taken the special influence of (cultural) diversity into account. Two innovative instruments that appear to have special relevance for the performance and well-being of individuals in diverse environments are the Multicultural Personality Questionnaire (MPQ) and the Attachment Styles Questionnaire (ASQ). We will discuss how these scales provide useful perspectives about intercultural effectiveness, motivation and performance in diverse environments, and exploration in culturally diverse settings.

#### Research/Practical Implications

A number of empirical studies have demonstrated the usefulness of these instruments beyond more traditional measures.

#### Originality/Value

The MPQ and the ASQ provide new instruments for explaining 3C from a personality/individual differences perspective.

### **Intercultural competence and situated learning**

*Stefan Kammhuber (Univ. of Applied Sciences Rapperswil) [skammhub@hsr.ch](mailto:skammhub@hsr.ch)*

#### State of the Art

Cross-cultural competence (3C) is here defined as both, the capability and the will to (1) perceive actively and continuously opportunities for intercultural learning in everyday life,

(2) to generate actively intercultural knowledge, and (3) to tackle action barriers with the respect towards the action consequences regarding the personal well-being, the relationship with the interaction partner, and the task to be fulfilled. Furthermore, 3C includes the capability and the will to do both, to evaluate and to communicate the experiences made during and after the course of action.

#### New Perspective/Contribution

3C is perceived as a continuous process of learning rather than a stable state. Applying the theories of situated learning, I will present how the capability for intercultural learning can be assessed by using authentic, real-world tasks and by applying qualitative methods, such as Intercultural Learning Portfolio and Qualitative Content Analysis.

#### Research/Practical Implications

I will share exemplifications for this kind of measurement in the realms of management, military, and student exchange programs.

#### Originality/Value

Theoretical development in 3C has shown little progress despite the development of numerous models and measures. The Intercultural Learning Portfolio and Qualitative Content Analysis approach provides fresh theorizing and measurement to the field.

### Assessing cross-cultural group competence

*Stefan Strohschneider (Friedrich-Schiller Univ. Jena)*  
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*Gröschke (Friedrich-Schiller Univ. Jena)*

#### Purpose

Our study aims to identify variables describing cross-cultural group competence and to develop a measurement approach accordingly. We define cross-cultural group competence as the way a team approaches its heterogeneity

and deals with the ambiguity in dynamic situations by focussing three dimensions: task-orientation and relation-orientation but also process-orientation.

#### Design/Methodology

We designed a quasi-experimental approach using simulation games as a context of high uncertainty, ambiguity and complexity. The face-to-face group interactions were videotaped and analysed. Data from 22 groups (of 3 to 6 group members) who differed with respect to their heterogeneity of group composition (e.g. nationality) and the duration of their cooperation (ad-hoc or long-term teams) were collected. Our mixed method approach combines observational data with portfolio assessment and a quantitative survey.

#### Results

Criteria to describe and observe the dimensions were derived. Teams, especially ad-hoc teams, were found to be possessed by their task. Relationship- and process-orientation were observed to a significantly lesser extent.

#### Limitations

The results are limited to the explorative character of the study and to the mono-cultural (German) research team. A (cross-cultural) validation study is needed.

#### Research/Practical Implications

The framework helps to describe cross-cultural group processes and can be used as support for cross-cultural team development.

#### Originality/Value

In our study, 3C of groups does not depend on the knowledge of cultural characteristics but on the processes within the team. Also, we gain deeper insights into cross-cultural group dynamics by operationalizing and observing the process-dimension from a communication, social-cognitivist and human factor psychology perspective.

### **Practical and theoretical considerations for measuring organizational cross-cultural competence**

*Marinus van Driel (Top Talent Solutions) [marinusvandriel@hotmail.com](mailto:marinusvandriel@hotmail.com), William K. Gabrenya (Florida Institute of Technology)*

#### **Purpose**

The aim of this presentation is to explore the application of different models to measure cross-cultural competence (3C) at the organization level. A variety of models are available for the purpose of assessing 3C at the organizational level, some of which have been used empirically, others which have not. By exploring existing data, this presentation will highlight the benefits and pitfalls of 5 different approaches to measure organizational 3C.

#### **Design/Methodology**

Data included in this presentation (N = 14666) were collected via three waves of surveys administered to members of 239 organizations. Each wave used a different approach to conceptualize organizational level 3C. These approaches in successive order are a direct consensus model which focused on individual level competencies, a referent shift consensus model which focused on organizational attributes, and a referent shift consensus model focused on behaviours.

#### **Results**

Each approach proved effective, but also has limitations. Furthermore, each approach was related to organizational outcomes associated with diversity issues as well as perceptions regarding organizational performance.

#### **Limitations**

Two models that will be described in this presentation are not empirically assessed, however, their value and practical utility will be explored in light of the empirical findings included in this presentation.

#### **Research/Practical Implications**

Using 3C as a vehicle, this presentation will shed light on the theoretical and empirical considerations that are necessary to accurately conceptualize and measure organization level competency.

#### **Originality/Value**

This study contributes to the existing 3C knowledge base by providing empirical and theoretical insights not yet entered into published literature.

### **Minorities and their careers**

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#### **State of the Art**

Organizations in most industrialized nations intend to facilitate the inclusion of diverse employees in their recruitment, advancement, and retention efforts. At the same time, enduring patterns of exclusion may be concealed just below the surface (Ghorashi, 2007). Status attributions based on employees' demographic characteristics (Fiske et al., 2002), the ongoing construction and formation of identity triggered by the context ("identity works"), and the possibility of identity regulation through a third party are all examples as relevant aspects for (objective) career success (Alvesson et al., 2008). Obtaining a better understanding of the obstacles to the career success of minority group members is a prerequisite for the identification and removal of the exclusion of minorities.

#### **New Perspective/Contribution**

By focusing on the dynamic and reciprocal relationships between the individual and others (e.g. colleagues and the organization), we



include studies in this symposium that show how identity and status formation plays a role in (the experience of) career opportunities and obstacles. As such, we combine new (theoretical) perspectives on potential obstacles to the career progression of minorities and provide empirical data that suggests that the situation is more intricate than the conventional belief that minorities are excluded and discriminated against.

#### Conclusion and Implications for Research/Practice

We propose a number of practical implications and a research agenda that we will discuss in the final section of our symposium.

### ***Presentations of the Symposium***

#### **How does identity work at work? Identity matters in ethnic diversity, gender, and career advancement**

*Carolien Ossenkop (VU Amsterdam) [c.ossenkop@vu.nl](mailto:c.ossenkop@vu.nl), Claartje Vinkenburg (VU Amsterdam), Paul Jansen (VU Amsterdam), Halleh Ghorashi (VU Amsterdam)*

##### Purpose

In our effort to uncover, understand, and make sense of career opportunities and obstacles of diverse employees (including both the dominant and the minority group) in the Netherlands, we find that identification with and salience of relevant identity(ies) appeared to play an important role. We explore how identity works at work and how this can be related to career advancement of diverse employees.

##### Design/Methodology

We analyzed 26 semi-structured interviews conducted among a sample of professional employees (diverse with respect to ethnicity and gender) of a financial service provider in the Netherlands.

##### Results

Preliminary analysis shows that both the extent of salience of different identities and the perception of the specific context lead to different perceptions of diversity categories for members of different groups, translating into individual experience and interpretation of career opportunities and obstacles.

##### Limitations

Due to the qualitative design of the study, all findings are context-specific, decreasing the external validity and replicability. Additionally, identity was not explicitly addressed in relation to career success, since its relevance emerged during the data-collection processes.

##### Research/Practical Implications

Our results support the development of evidence-based policies to create a more inclusive organizational culture in which career success is less elusive for members of minority groups.

##### Originality/Value

Our findings highlight the general assumption that the larger organizational context, position requirements, and promotion criteria are identical for all involved; simultaneously, they address how identity matters in the context of diversity and career advancement by showing that “doing career advancement” is different from “talking diversity”.

#### **Towards inclusive careers: New career models from the perspective of disadvantaged groups**

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##### State of the Art

In recent years, “new” career models, like the boundaryless and the protean career, are being increasingly debated, among others because of their strong focus on individual agency (Arthur & Rousseau, 1996; Inkson, et al.,

2012). Given the lack of attention in these career models for structural constraints in general and for the barriers faced by specific groups in particular (Inkson et al., 2012; Pringle & Mallon, 2003), the purpose of this article is to bring the voice of disadvantaged groups into these debates, to examine how career models that strongly focus on individual agency risk reproducing existing inequalities, and to propose ways to move towards more inclusive careers models.

#### New Perspective/Contribution

In this theoretical article, we illustrate our arguments with qualitative material gathered through interviews and focus groups with employees from disadvantaged groups (such as women, ethnic minorities, individuals with disabilities and older workers) and with career counselors. Individuals from disadvantaged groups are faced with a range of obstacles endangering their career success. The persistence of these structural barriers point to a number of risks connected to career models focusing exclusively on individual agency, and to the fact that making careers more inclusive depends on rethinking career norms privileging dominant groups.

#### Research/Practical Implications

This article highlights the need for more attention for disadvantaged groups and structural constraints in career theory.

#### Originality/Value

Contributes to the literature by reflecting on career debates from the perspective of disadvantaged groups and by proposing ways to make career models more inclusive.

### **Cultural diversity in organizations: Ethnic minority careers in different national and organizational contexts**

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#### Purpose

Due to globalization and migration the importance of cultural diversity in organizations is increasing. Little research has investigated the personal, organizational and national context of ethnic minority careers, particularly outside a US-American context. In this paper findings from four qualitative interview studies will be presented that aimed at identifying experiences of members of minority and majority groups in different culturally diverse organizations while considering the specific national cultural context. This research is embedded into an international EU-funded project on workplace diversity.

#### Design/Methodology

Semi-structured qualitative interviews were conducted with employers and employees of different cultural backgrounds, age, positions and gender in New Zealand ( $n_{\text{employers}} = 18$ ;  $n_{\text{employees}} = 78$ ) and Austria ( $n_{\text{employers}} = 29$ ;  $n_{\text{employees}} = 19$ ).

#### Results

Similar management issues were identified that were relevant in both national contexts such as selection bias, language issues and lack of implemented diversity management practices. Those issues made entry into and advancement within organizations more difficult for members of ethnic minority groups in management as well as non-management positions.

#### Limitations

The findings do not present an in-depth analysis of the specific mechanisms behind those identified issues and the personal coping strategies of the participants.

#### Research/Practical Implications

Specific organizational and national context factors will be discussed that are supportive for the inclusion and advancement of different groups of employees.

**Originality/Value**

This research includes experiences and perspectives of minority and majority group members on options and possibilities in culturally diverse organization while considering their position and cultural background in two different national contexts.

### **Understanding increases in the salience of minority ethnic identity at work**

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**Purpose**

To explore how and when ethnic identity becomes more relevant to minority ethnic graduate employees' everyday experience of their organisations and careers.

**Design/Methodology**

Qualitative interviews were undertaken with thirty British black Caribbean graduate employees drawn from a range of organisations. Interviews explored how and when their ethnic identity increased in salience at work, and some of the resulting career-related thoughts and behaviours.

**Results**

The study demonstrated that ethnic identity at work increased in salience in two key ways: through 'ethnic assignation' and 'ethnic identification'. When ethnic identity increased through ethnic assignation, participants felt that colleagues and clients were viewing them only in terms of their ethnic group membership with all other, more relevant work-related identities being ignored. When ethnic identity increased in salience through ethnic identification, participants experienced a connection between their ethnic identity and some aspect of their work. In this way ethnic identity salience was experienced both as a 'push' to an identity (though ethnic assignation) and a 'pull' towards identity (though ethnic identification), both of which impacted

on subsequent career-related thoughts and behaviour.

**Limitations**

The sample size was relatively small and participants were drawn from one ethnic group.

**Research/Practical Implications**

The study highlights the way in which a key social identity is actually experienced within the workplace and some of the career-related consequences.

**Originality/Value**

We examine ethnic identity as a dynamic rather than static phenomenon and introduce the concepts of ethnic assignation and ethnic identification.

### **Gender differences in career progress: An examination of the role of development reports**

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**Purpose**

Abundant research shows that career progression of women is hampered compared to the career progression of men. In particular in masculine environments it appears harder for women to 'reach the top' due to persistent negative stereotypes against women obtaining high-ranked positions in organizations and sectors that traditionally are male-dominated. We examine to what extent development reports explain such gender differences in career progress in a multinational company that has invested a lot in creating an inclusive climate but that continues to struggle with the representation of women on higher positions.

**Method**

After an analysis of 181 developmental reports, three different groups of organizational employees rated the extent to which the 35 most frequently mentioned attributes in the

developmental reports were perceived important for promotion to a leadership position ( $N = 166$ ), were perceived to be typically masculine attributes ( $N = 142$ ), or were perceived to be typically feminine attributes ( $N = 111$ ).

#### Results

Preliminary results indicate that men and women are stimulated to develop according to their respective social role, but that feminine attributes are considered more important for promotion.

#### Limitations

We did not objectively measure career success.

#### Value

Our findings show that developmental conversations and reports are affected by social role expectations. We discuss to what extent these findings indicate that conventional approaches to developing employees contribute to the exclusion of women in leadership positions.

### Position Papers

#### **How Evidence-Based is Work and Organizational Psychology? Some Criteria for Evaluating how far We've Got and Some Suggestions for Speeding up Progress**

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#### State of the Art

The idea that Work and Organizational Psychology (WOP) practice should draw on the best available scientific evidence has been discussed for many decades as has the 'gap' or 'divide' between practitioner and researcher (e.g. Anderson, Herriot & Hodgkinson, 2001). In spite of this, it appears that little progress has been made in better integrating research and practice. A more recent approach – evidence-based practice – used in medicine and other fields provides a framework for thinking

about how practitioners can make better use of scientific (and other) evidence in their work.

#### New Perspective/Contribution

There has been and continues to be much debate about the links between research evidence and practice in WOP. One way of improving such links is through adopting the principles of evidence-based practice as applied to organizational psychology and management (see, Briner, 1998; Briner, 2011; Briner & Rousseau, 2011).

In order to further develop and adopt evidence-based practice principles in WOP it is essential that we attempt to assess the extent to which WOP practice is currently evidence-based. One way of doing this is through using a set of criteria describing conditions which, if present, would indicate that any profession is evidence-based. Using these criteria can help us to judge how far we have got and the areas in which we need to do more work to develop evidence-based practice in WOP.

Briner & Rousseau (2011) developed seven such criteria and participants in this session will consider the extent to which these criteria are valid and accurately describe current WOP practice:

1. The term "evidence-based" is well-known and used: While it may be possible to practice in an evidence-based way without using the term given the huge growth in this area it is unlikely that any field which was using this approach would not use this term.
2. The latest research findings and systematic research summaries are accessible to WOP practitioners: It is not possible to practice in an evidence-based way without access to evidence in journals and systematic research summaries.

3. Articles reporting primary research and traditional literature reviews are accessible to practitioners.

4. 'Cutting-edge' practices, panaceas and fashionable new ideas are treated with healthy scepticism: While some new ideas do eventually turn out in the longer-term to be sustainable and supported by evidence most do not.

5. There is a demand for evidence-based practice from clients and customers: In order for practitioners to practice in an evidence-based way their clients have to want or at least not reject interventions based on evidence.

6. Practice decisions are integrative and draw on the four sources of information and evidence described in the definition of evidence-based psychology and management: Evidence from external research is just one source of evidence.

7. Initial training and continuing professional development adopt evidence-based approaches: Evidence-based practice approaches to initial training and continuing professional development emphasize both the acquisition of knowledge and the development of skills required to find and use relevant external evidence.

While we can see that WOP meets some of these criteria to some extent, the profession of WOP is still some way from being an evidence-based profession and nor are academics or researchers much engaged in contributing to progress.

#### Conclusion and Implications for Research/Practice

The session will conclude by considering where the largest gaps between current WOP practice and evidence-based practice may exist and suggest some ways in which we can make quicker progress. This has implications for WOP practitioners including the way they currently work, their continuing professional

development, and the marketing and positioning of WOP with clients and customers. There are also many implications for academics including redesigning the training of work and organizational psychologists, and the roles and responsibilities of academics and researchers in making research findings more accessible to practitioners. There are many barriers to evidence-based practice but it is vital, if we believe that WOP practice should be based on science, that these begin to be openly discussed and practical ways of overcoming them implemented.

#### Work-Role Transitions: The Need for a Broader View

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##### State of the Art

Work-role transitions (WRTs) can be defined as any move into or out of work roles, or between work roles (Nicholson & West, 1988). They constitute key marker events in careers and can be seen as times when much is at stake for both person and organization. WRTs come in many different forms. These include education to work, retirement, unemployment, re-employment, promotion, demotion, expatriation, repatriation, and many others. This list reflects the diversity and also the polarities of WRTs. WRTs are theorized in the context of mobility (Forrier et al, 2009) but on the whole, they are no longer treated by work psychologists as a generic phenomenon worthy of study. Instead, there are substantial literatures on specific transitions such as expatriation in large companies, Chief Executive Officer succession, moving from education to work, and retirement. Numerous theoretical perspectives are brought to bear on the analysis of transitions. These can loosely be grouped into three types: stress, learning and personal agency.

There is nothing inherently wrong with the trend to study specific phenomena that people can relate to and have “real world” significance, nor with the multiplicity of theoretical approaches. However, without a more general perspective on transitions it is likely that each of these areas is missing out on important potential insights and avenues of investigation. Furthermore, it is noticeable that many studies that claim to be about transitions are not really studying the transition *per se*, but other things such as commitment, adjustment, job satisfaction amongst people who happen recently to have made a transition. Some other studies, for understandable pragmatic reasons, often only get as far as intention to undertake a transition (e.g. intention to leave the organization).

#### New Perspective/Contribution

I propose that a number of developments in the way we study WRTs would be helpful. First, it is necessary to establish what we mean by transition. Definitions are normally framed in terms of events, and studies of transition may arbitrarily specify a certain time frame that is deemed to be transitional. However, a more subjective approach may be helpful. I suggest we define the period of transition as beginning when a person starts to devote significant cognitive, behavioural and/or emotional resource to preparing for a transition, or to seeking one. It ends when further cognitive, behavioural and/or emotional changes a person encounters or initiates are experienced as fine-tuning of an essentially stable situation. Note that this does not necessarily mean that the person is happy with his or her post-transition situation.

Second, work psychologists seem often to treat a WRT as a “black box” into which go inputs such as individual differences and out of which come outcomes like adjustment. There is not enough examination or analysis of the processes by which people and organiza-

tions tackle transitions (except for the HR literature on induction or “onboarding”). We need to be more willing to conduct studies of people in transition and what they are thinking, feeling and doing at the time. Perhaps even more radically, we should entertain the idea that the transition process is worthy of study in its own right, and not always focus on cause-effect relationships between variables.

Third, we need to borrow from other disciplines and take macro factors into account, such as labour market conditions, organizational policies, recent organizational history and other things that Johns (2006) and others refer to as context. Furthermore, we should consider these as possible outcomes of transitions as well as inputs into them. The literature on CEO succession majors on the effects of person on macro environment. However, in most other analyses of transition the potential for individual agency in transition to influence structure is largely neglected, despite it being explicit in early analyses, in the form of role innovation.

Fourth, as well as what might be termed the content of transition (promotion, job rotation etc) we need to pay a lot more attention to what might be called the core features of the transition. This includes factors that figure quite large in some sociological and life-span developmental analyses of transitions (Brim & Ryff, 1980). Is the transition reversible? Is it occurring on-time or off-time? Is it experienced by many in society, or by few? Is it being navigated alone, or are there others in the same boat? Is it widely discussed, or perhaps a little shameful or even taboo? Was its occurrence predictable to the individual? These dimensions may well be very significant in the way transitions are navigated by individuals, groups and organizations. They can also be applied across a range of types of transition.

Conclusion and Implications for Research/Practice



It is helpful to step back from specific work role transitions and try to re-visit and newly develop theory that applies to all WRTs. That does not mean treating WRTs as if they were all the same, but developing and using concepts that can be generally applied. We also need to pay closer attention to how people experience transitions and weave the into their identity and life narrative. The implications are that those who study specific transitions should seek to embed what they do using transferable concepts, and those who study transitions in general must be aware of all the sub-literatures, learn from them, and extract the recurring themes as well as promoting the use of existing theory with wide applicability.

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#### Single Papers

##### **How unethical can you get? Some challenging thoughts about the future of organizational and work psychology**

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Professions have been called 'a conspiracy against the laity' (Shaw; 1906); in many European countries the statutory control of psychologists is either already a fact or a plan; indeed the EU is looking in this direction with The European Professional Card as is EFPA.

In this paper I will present a number of ethical and regulatory themes that will impact on the work of EAWOP members in the future; these include public and political concern about the power of professions, a diminution of trust, the rise of audit, the fetish of 'best practice' and the possible rise of 'Defensive Psychology' as (almost) predicted by O'Neil (2002)

This paper will argue that because the professional subject matter of EAWOP practitioner members has so many overlaps with that of HR professionals, OD consultants, Trainers, Coaches and others, we will inevitably find ourselves with a problem. These groups will be able to use psychology without being psychologists; however, they will increasingly practice in areas and ways that make them indistinguishable from W&O psychologists; and if W&O psychologists, for reasons of principle or of commerce, avoid, or merely give lip service to regulation, then significant ethical issues arise.

For instance, is it more unethical to avoid calling oneself a psychologist whilst being one, or more unethical to submit to a regulatory regime that is predicated on an inappropriate (often medical) model of psychology?

We will raise various questions and dilemmas that our 'future world' will likely contain for European practitioner psychologists.

### **Köhler-Effect without a group? Individual motivation gains through the comparison with the own previous performance**

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#### **Purpose**

Working together in groups is an inherent part of today's working environment. One important condition for performance in groups is the motivation of their members. Miscellaneous findings indicate motivation gains for inferior group members. This so-called 'Köhler-effect' can be explained by social indispensability and upward social comparison (Weber & Hertel, 2007). Since individuals can also compare themselves with their prior self the question rises whether the benefits of the Köhler-effect can be transferred to individual tasks and caused by the comparison not with another group member but with the own previous performance?

#### **Design/Methodology**

122 students worked on a physical endurance task twice. During the second trial half of the test persons received a bogus feedback on their previous performance in the form of a light glowing as long as participants' had performed during the first trial. The feedback was rigged to indicate superior previous performance and, thus, never turned off before participants ended the second trial.

#### **Results**

Participants receiving feedback performed better in the second trial. This is in line with the idea of motivation gains due to social comparison with one's prior self.

#### **Limitations**

Student sample with a simple physical task. No strong tests of the psychological mechanism yet.

#### **Research/Practical Implications**

Even if working together in groups isn't possible the individual motivation can be enhanced through the comparison with the own prior performance.

#### **Originality/Value**

To our knowledge, the study is the first to transfer motivation gains such as the Köhler-effect from a group to an individual setting.

### **Career networking amongst university researchers**

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#### **Purpose**

To examine the networking activities undertaken by researchers, their concerns about doing networking, and the career-related outcomes of networking.

Advocates of career management often emphasize the value of networking to create and take advantage of opportunities. However, there is little empirical analysis of whether this actually produces positive outcomes, or of the reservations about networking people may experience.

#### **Design/Methodology**

An online questionnaire was completed by 492 research-only staff in eight UK universities of various traditions and locations. Also, interviews were conducted with 46 researchers, and 18 staff who had responsibility for researcher career development.

### Results

All networking activities (out of a list of 14) were engaged in "Quite a lot" by fewer than half the respondents. Researchers seemed particularly reluctant to try to engage with prominent people in their field. Reluctance to network appeared to stem primarily from feelings of lack of time to do it, lack of self-confidence and worry about the falseness of networking relationships. Networking and attitudes to it were related to career satisfaction and career help received after controlling for other relevant variables.

### Limitations

The study is cross-sectional and self-report, although interviews with research managers corroborated many of the findings.

### Research/Practical Implications

Networking training needs to address reluctance arising from low self-confidence and ethical concerns. Research can build on these findings by examining the benefits of networking in other occupations and for other career outcomes.

### Originality/Value

This study is unusual in offering a mixed methods analysis of networking activity and its potential outcomes using networking measures customized to the context.

## Exploring the role of individual differences in the prediction of innovative behavior in police organization

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### Purpose

The purpose of this study is to investigate the relationship between personality traits, emotional intelligence, locus of control, self-efficacy and innovative behaviors at work in police.

### Design/Methodology

The study's participants were 245 employees working at Abu Dhabi Police in the UAE. Data were collected through a number of self-report measures that administered to the employees. Innovative Behavior was established through the organization's own appraisal process. A variety of statistical analyses were used, such descriptive statistics, Cronbach's Alpha, bivariate correlation, and multiple regression analysis.

### Results

Findings show that Openness to Experience, Extraversion, Emotional Intelligence, Locus of Control, and Self-Efficacy were all significantly correlated with innovative behavior at work. Results from the stepwise regression analysis show that four independent variables (i.e., openness to experience, emotional intelligence, locus of control, and extraversion) contributed significantly to prediction of innovation at work.

### Limitations

Perhaps the major limitation concerns the use of self-report measures.

### Practical Implications

Organizations that seek ways in which to foster innovative behaviors need to recognize the importance of personality traits, emotional intelligence, locus of control, self-efficacy in the selection and training of their employees.

### Originality/Value

Innovation is critical for organizational long-term prosperity, and thus, this research suggests ways for organizations to enhance their innovativeness through employees. In addition, the current study is one of a very few studies in middle east that investigate the role of individual differences in the prediction of innovative behavior in police organization.

## Measuring innovativeness in a work-related context

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### Purpose

Creativity, or in a much broader sense, innovativeness has been referred to as a syndrome, pointing out the interplay between cognitive and noncognitive constructs. Although the incremental role of noncognitive components concerning innovative achievement is well known, measures designed for work-related contexts are scarce. Hence, our aim is to provide a measure of individual innovative and creative behavior. We identified three core components encompassing creativity and innovativeness in an extensive literature search: generating a search field (problem finding, opportunity recognition), idea production (ideation, elaboration) and implementation (evaluation, integration, persuasion).

### Design/Methodology

Items were generated based both on interviews with subject matter experts (creative and innovative industry) and reviewing research on personality and process models of creativity. In study 1 (N = 250 undergraduates), we tested a preliminary version of the Individual Creativity and Innovativeness Questionnaire. In study 2, the ICIQ was administered online to 200 working adults. Additionally, we gathered data on related constructs (e.g. openness, creativity) and criterion-related validity (e.g. self- and peer-ratings of creative and job performance).

### Results

The factorial structure of the ICIQ is in line with its theoretical framework. Construct and criterion related validities are satisfying.

### Limitations

We cannot yet provide information about the ICIQ and supervisor ratings of innovative behavior.

### Research/Practical Implications

The ICIQ aims for use in personnel assessment in the context of placement, development, coaching, etc.

### Originality/Value

To date, there exists no comprehensive measure for testing individual creativity/innovativeness specifically constructed for the (German) work-related context.

## How do you want to work, how do you want to live? Addressee and context effects threaten the validity of work-life-balance survey results

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Many organizations implement work-life-balance programs to enhance their employees' well-being and their own employer attractiveness. This process usually includes demand assessments concerning employees' perceived stress, attitudes and needs. Such applied surveys often ignore that self-reports may be heavily affected by social desirability and contextual priming effects.

In Exp. 1, N = 120 working adults filled in a work-life-balance survey ostensibly conducted in cooperation with a fitness center vs. a consulting group. Half the subjects in each addressee condition were assessed under bogus pipeline conditions. As a third, explorative factor participants were recruited on Tuesdays vs. Saturdays, respectively. As expected, self-reported career-orientation was significantly higher in the consulting group than in the fitness center condition. This addressee effect was substantially diminished when participants believed that "lies" would be detected. Moreover, participants presented themselves

as more career-oriented on Tuesdays as compared to Saturdays.

In Exp. 2 ( $N = 60$ ), we experimentally manipulated the environmental context in which a questionnaire on career-orientation was filled in (on campus vs. in a café), and participants reported stronger career-orientation on campus. Study 3 replicates this finding with a sample of  $N = 80$  working parents filling in a work-family-balance questionnaire at their office vs. at home. The environmental context bias also disappeared under bogus-pipeline conditions and thus seems open to conscious control.

In sum, findings indicate that addressee and temporal-spatial context effects affect responses in work-life-balance surveys, casting serious doubt on their validity. The applicability of alternatives, such as diary or day reconstruction methods, observation, and implicit measures is discussed.

### **The relationship between work-related rumination and evening and morning salivary cortisol secretion**

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#### **Purpose**

Work-related rumination has been identified as a form of perseverative cognition that prevents post work recovery and prolongs physiological activation. This study aimed to explore the association of affective work-related rumination with salivary cortisol sampled at 10pm, and the cortisol awakening response (CAR) the following morning.

#### **Design/Methodology**

On a mid-week evening, 108 school teachers completed a small diary about their work related thoughts and gave a saliva cortisol sample at 10pm. The following morning, they gave four additional saliva samples: at awakening

and at 15, 30 and 45 minutes after awakening, along with a rating of their anticipatory thoughts about work. The CAR was calculated as the percentage increase in cortisol secretion from awakening to 30 minutes.

#### **Results**

The sample was divided at their respective medians to classify participants into low and high rumination groups. Cortisol secretion was significantly greater in the high compared to the low ruminators at 10pm, and this effect was not related to leisure activities or work patterns during the evening. For the morning measures, high ruminators demonstrated a flattened CAR relative to the low ruminators and this effect appeared to be associated with sleep disturbance during the night.

#### **Limitations**

It was not possible to objectively assess time of awakening or when saliva samples were given.

#### **Research/Practical Implications**

This study adds to the research that has examined how perseverative cognition prevents post work recovery.

#### **Originality/Value**

To the authors knowledge this is the first study to examine the effects of affective work-related rumination on salivary cortisol.

### **Flexibility at the workplace: Benefits and risks of flexible office concepts**

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#### **Purpose**

Recent technological developments allow organizations to implement flexible office concepts, giving employees the freedom to choose when, where and how to work. Such concepts aim to reduce costs, improve com-

munication, and foster teamwork. To date, little research has been done on flexible office concepts.

#### Design/Methodology

A literature review was conducted on studies examining the risks and benefits of flexible office concepts (e.g., desk-sharing, activity-related workplaces) on organizational outcomes. Additionally, 28 semi-structured interviews were conducted with knowledge workers of a German company that just had switched to a flexible office concept.

#### Results

This paper summarizes existing research on benefits and risks of flexible office concepts. These initial insights are extended by results from the interviews. For instance, 46.4% of the employees highlight the role of trust for a beneficial use of flexible office concepts. Moreover, while 67.9 % of the workers reported that collaboration across different teams improved due to better communication, 53.6% of the employees reported that collaboration within teams suffered from the new office structures.

#### Limitations

Due to the lack of quantitative studies, the literature review is mainly based on qualitative studies.

#### Research/Practical Implications

The results illustrate the importance of trust management during the implementation of flexible office concepts. Moreover, increases in interteam collaboration due to flexible office concepts might be connected with unexpected costs within existing teams. Future research is desirable that confirms these initial findings.

#### Originality/Value

This paper provides a first research review on the benefits and risks of flexible office concepts, extended by first quantitative and quali-

tative data collected from employees switching from traditional to a flexible office structure.

### **Sleep quality and job strain interact to predict diurnal cortisol secretion**

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#### Purpose

To analyze if sleep quality and job strain was related to the diurnal pattern of cortisol reactivity, measured as the mean difference between awakening and evening (10PM) measures of saliva cortisol over a full work week period.

#### Design

Sleep quality, using the PSQI, and job strain, using a modified version of the JCQ, were assessed for each work day using a self-report diary. Both input variables were dichotomized about the median and a factorial ANOVA was used for the statistical analysis. The sample consisted of 76 British white-collar workers (24 women, 52 men; mean age 45.8 years).

#### Results

Lower perceived sleep quality was significantly associated with a lower difference between morning and evening cortisol secretion ( $F=5.20$ ;  $p<.05$ ), while job strain had no main effect on the diurnal pattern of cortisol reactivity. There was however a significant interaction effect between the input variables ( $F=4.08$ ;  $p<.05$ ), indicating that participants with low sleep quality and high job strain had the smallest difference between morning and evening cortisol over the week.

#### Limitation

Morning cortisol was not assessed by the full Cortisol Awakening Response.



## Research

These findings support the hypothesis that lack of sleep particularly among white collar workers with high long-term job strain may result in an altered diurnal cortisol secretion pattern between morning and evening cortisol reactivity.

## Value

The study was based on both morning and evening cortisol readings taken over a full work week.

## Posters

### Experience crafting behaviour: A proactive approach towards professional development. Empirical insights from a qualitative interview study

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## Purpose

Although workplace environments usually offer employees a range of learning affordances (Billett, 2004; Lave & Wenger, 1990), certain learning opportunities that are relevant for performance and expertise development can be initiated only by the employee her/himself. Such a proactive, self-initiating approach to learning at the workplace will be subsumed in the concept of experience crafting behaviour. Experience crafting behaviour (ECB) comprises a range of behavioural patterns aiming at the self-initiated creation of novel work-related experiences with a focus on the development of the professional self. Although such behaviour is documented in the empirical literature (e.g., Bryson et al., 2006; Gustavsson, 2007; Sonnentag & Kleine, 2000), we know very little about its antecedents and about its impact on work performance.

## Design/Methodology

To get further insights into ECB we conducted 20 expert interviews with staff nurses in geriatric care. The interviews have been analysed using qualitative content analysis.

## Results

The data gave insights what kind of ECB is practised in geriatric care, how ECB is connected to expertise development and performance, as well as what individual and situational factors affect the engagement in ECB.

## Limitations

Our qualitative findings should be validated using a quantitative methodological approach.

## Research/Practical Implications

Future studies on expertise development and work performance should control for the possible influence of ECB.

## Originality/Value

Although the discussion of self-started and proactive behaviour within the organisational behaviour literature has been quite extensive in the recent years (e.g., Bindl & Parker, 2010; Frese & Fay, 2001; Wrzesniewski & Dutton, 2001) no research was directed towards proactive learning behaviour at work.

### Quality of feedback following performance assessments: Does assessor expertise matter?

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## Purpose

This study investigates quality of feedback immediately following assessment of performance in professional training in a health care setting. It furthermore investigates if and how different levels of supervisor-assessor expertise influence feedback characteristics.

**Design/Methodology**

Experienced (N = 18) and non-experienced (N = 16) supervisors with different levels of assessor expertise in General Practice (GP) watched two videotapes, each presenting a trainee in a 'real-life' patient encounter. After watching each videotape, participants documented performance ratings, wrote down narrative feedback comments and verbalized their feedback. Deductive content analysis of feedback protocols was used to explore quality of feedback. Between-group differences were assessed using qualitative-based quantitative analysis of feedback data.

**Results**

Overall, specificity and usefulness of both written and verbal feedback was limited. Differences in assessor expertise did not seem to affect feedback quality.

**Limitations**

Results of the study are limited to a specific setting (GP) and assessment context. Further study in other settings and larger sample sizes may contribute to better understanding of the relation between assessor characteristics and feedback quality.

**Research/Practical Implications**

Findings suggest that even with trained supervisors, high-quality feedback is not self-evident; coaching 'on the job' of feedback providers and continuous evaluation of feedback processes in performance management systems is crucial. Instruments should facilitate provision of meaningful feedback in writing.

**Originality/Value**

The paper investigates quality of feedback immediately following assessment of performance, and links feedback quality to assessor expertise. Findings can contribute to improvement of performance management systems and assessments for developmental purposes.

**The relation between learning approaches, motivation and workplace climate for knowledge-workers**

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**Purpose**

This paper investigates individual differences in the learning approaches and motivational regulations of knowledge-workers and their relation with the workplace climate.

**Design/Methodology**

Knowledge workers (N=267) were questioned using existing and sometimes adapted questionnaires measuring learning approaches (AWQ), motivational regulations (SRQ) and workplace climate (WCQ). Descriptive statistics, partial correlations and multivariate multiple regression analyses were used to analyze the data.

**Results**

Results indicate that knowledge workers are in general autonomously motivated and prefer a deep learning approach. Significant positive relations were found between autonomous motivation and a deep learning approach and between controlled motivation and a disorganized surface approach. Additionally, results demonstrate a significant and small to medium effect of workplace climate factors on motivation and learning approaches. Knowledge workers who experience good supervision and sufficient freedom of choice, are more autonomously motivated. Good supervision is a negative predictor of lack of motivation. Knowledge workers that experience sufficient freedom of choice and a high workload, appear to make more use of a deep learning approach, while knowledge workers who experience a high workload and inferior supervision, predominantly prefer a disorganized surface approach. Knowledge workers

with less freedom of choice have a higher preference for an organized surface approach.

#### Limitations

This study solely uses self-report questionnaires.

#### Research/Practical Implications

Researchers/practitioners should take into account workplace climate factors in research/practice as they are related to both learning and motivation.

#### Originality/Value

Results indicate that workplace climate has a significant and considerable impact on the learning approach and motivation to learn for knowledge workers.

### **The relative importance of work-related learning goals across the career: Does age really matter?**

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#### Purpose

In ageing societies, which are characterized by an ever-changing labor market, the importance of lifelong learning is increasing. The aim of this exploratory study is to understand the relative importance accorded to work-related learning goals across age.

#### Design/Methodology

An online questionnaire was distributed through different social networks. The data is analyzed using multidimensional unfolding and multiple regression analyses.

#### Results

Preliminary analyses show that when controlling for personality variables (proactive personality, work centrality), the negative relationship between age and importance of

learning goals diminishes. More importantly, job tenure is a better predictor: amount of years working in the same job is negatively related to importance of learning goals, even when controlled for personality variables.

#### Limitations

We focus on a selective perspective of the motivational changes in the working life, based on the age-related motivational decline. In future studies, we should consider the view of age-related motivational maintenance (Gegenfurtner & Vauras, 2012).

#### Research/Practical Implications

Some factors are more influential than age in order to understand the importance attributed to learning goals. Our results minimize the commonly assumed relationship between age and the decline in motivation to learn. Our results are promising for interventions we plan to do in future research. It is easier to implement actions linked to job tenure than a factor as chronological age.

#### Originality/Value

To our knowledge, there are no studies focusing on the evolution of learning goals across the working life. Furthermore, the study of work goals received only limited attention in the literature (Hyvönen, 2011).

### **Driver fatigue detection - Do the systems keep their promise?**

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#### Purpose

The recent introduction of several driver fatigue detection systems on the market aims to reduce fatigue related accident numbers. The common system feedback consists in a suggestion to take a break and a coffee cup symbol. Until now, little is known about the users' perspective on these systems after practical experience with it.

**Design/Methodology**

Users of driver fatigue detection systems evaluated the system functioning and behaviour modifications due to the system in a survey. Based on previous work drivers were asked about their experience of false alarms, hits or misses and about the compliance with the system recommendation. The perceived benefits of the system versus undesired behavioural adaptations were also asked for. In addition, urgency of the system feedback, its importance, association with fatigue, implicated danger of the situation and acceptance were rated.

**Results**

Results will be presented on the conference.

**Limitations**

The survey reveals the drivers' perspective on driver fatigue detection systems. Reported system misinterpretation of the drivers' fatigue level cannot be definitely ascribed to the systems' malfunctioning, as false self-assessment of the drivers can also be accountable for the perceived discrepancy.

**Research/Practical Implications**

Results might help to determine whether current systems in the market and their feedback design show promise for reducing accident numbers and to identify their weak points.

**Originality/Value**

Until now, not a single study deals with hindsight evaluation of the current driver fatigue detection systems displaying a coffee cup symbol. The study wants to provide evidence for the systems' effectiveness.

**Increasing (with 50-100%) the amount of quality decisions of a 1,8 B€ global engineering company. Adding value by integrating knowledge of several wop domains**

***Nominated for the EAWOP Congress 2013 Best Poster Award***

*Kristiina Fromholtz-Mäki (People and Organization Consulting, FI) [kristiina.fromholtz-maki@cresco.fi](mailto:kristiina.fromholtz-maki@cresco.fi)*

**Purpose**

The purpose of the Practitioner Poster is to describe the demand to master knowledge of several wop domains to create results and add value for the businesses as a wop practitioner.

**Design/Methodology**

Consultation project to support creation of a global, virtual quality organization to make corrective quality decisions locally using web-tool. Key focus areas were organizational design, organizational operational model creation and implementation supported by five regional kick-offs in 2009 and organizational development in 2012 (Nordic, Central-Europe, China, India, US).

**Results**

The Poster is based on project description. Figures from the global quality web tool show the significant growth of corrective quality decisions.

Results are based on integration of several wop theory domains (integrated with industrial management knowledge), as follows:

Organizational structure and design. Job analysis and competence modeling. Organizational change processes. Change leadership. Organizational learning. Personnel selection. Team based organizations. Inter-team relations in multi-cultural organizations. Virtual team work. Coping with change: working with emotions-thoughts-behavior-model. Cross-cultural differences. Team leadership. Trust creation. One-to-one communication. En-

gement. Work stressors. Negotiation skills. Problem solving and decision making.

(Industrial management knowledge: Break-through process management. Quality management. Profitability and productivity in production).

#### Limitations

The Poster is based on project description. Figures from the global quality web tool show the significant growth of corrective quality decisions.

#### Research/Practical Implications

Demonstrate practitioners' challenges. Create ideas how to improve EAWOP Congresses in creating co-operation between practitioners' experiences/insights and researchers' findings/insights.

#### Originality/Value

A five-region wide, strategically important, business driven cross-cultural project with proven business facts as a result to demonstrate the value of work and organizational psychology.

### **What should I study? - Identifying study fields with Holland's model of interests for future students**

#### ***Nominated for the EAWOP Congress 2013 Best Poster Award***

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#### Purpose

It is becoming more difficult for prospective students to choose the right degree programme. If students make a wrong decision, they will be dissatisfied with their study and are more likely to quit it. To reduce number of college drop-outs, it is important to consider the interests of prospective students and get a good person-environment fit. We used the

Holland model of vocational interests to generate a profile of interests for each degree programme from the University of Wuerzburg.

#### Design/Methodology

To identify the codes of interests for about 100 degree programmes offered at the University of Wuerzburg, we conducted an online survey of academic staff. We invited more than 1,500 academics and asked them to evaluate necessary interests for a successful graduation. We used a test which was developed by members of the University of Saarland (Stoll, & Spinath, 2008). The scale refers to Holland's model of interests and consists of 48 items.

#### Results

We analyse data to get an individual code of interest for every course of study. Additionally, we conduct cluster analysis to identify similar codes of interests between degree programmes and to group them into different study fields.

#### Limitations

Our sample includes only members from the University of Wuerzburg. Therefore, results should be generalized with care across other universities.

#### Research/Practical Implications

We focus on creating codes of interests for courses of studies and study fields. Based on the concept of person-environment fit, we want to recommend degree programmes and study fields for future students.

#### Originality/Value

This survey includes a very large sample and refers to a large number of degree programmes.

**Objective and subjective body image: It's relation to organizational justice**

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**Purpose**

Over the past few decades a considerable amount of research has been conducted on the impact of physical appearance on success in the labour market. It has been found that a particular group of people could be discriminated in work environment because of physical appearance. However, scientific studies have not taken into account the objective and subjective body image. The purpose of this study was to analyse the objective and subjective body image in relation to organizational justice.

**Design/Methodology**

The sample consisted of 323 Lithuanian employees. Participants filled in anonymous self-reported questionnaires which assessed organizational justice (Colquitt, 2001), body mass index, and 6 dimensions of subjective body image (appearance and fitness/health evaluation, appearance and fitness/health orientation, overweight preoccupation, self-classified weigh; Cash, 2000; Brown, Cash, Mikulka, 1990).

**Results**

Contrary to expectations, there was found no significant difference between overweight participants and participants with normal weight in evaluating organizational justice. However, underweight employees felt less fair compared to the ones with normal weight or overweight. Moreover, participants who judged their subjective body image (appearance and fitness/health evaluation) more positively perceived their organization as more fair.

**Limitations**

Questions related to individuals' weight and physical appearance are sensitive and could be answered in socially desirable way.

**Research/Practical Implications**

This study brings researchers' and practitioners' attention to the objective as well as the subjective body image as important issue analysing organizational justice.

**Originality/Value**

The subjective and objective body image was analysed in relation to organizational justice for the first time.

**Improving graduate employability via development of proactive behaviours: Validating a measurement instrument**

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**Purpose**

The modern workplace has a growing need for employees who display proactive behaviours especially in times of economic turbulence. From an employee perspective proactive people often have more success in finding jobs and experience greater career success and job satisfaction in employment. Therefore proactivity is of interest to both graduates and universities. However, justifying investment in activities to develop proactive behaviours involves being able to assess levels of proactivity before and after different development interventions. This paper outlines a validation study of such measurement instruments within a UK university.

**Design/Methodology**

167 students completed three different questionnaires assessing two different proactivity constructs.

**Results**

Analysis indicates that the instruments used are valid tools for measuring both proactive



personality and personal initiative within the university context. A range of scores allows for differentiation between individual students and student groups. Proactive personality is less affected by age and therefore appears more stable than personal initiative.

There is some indication that proactive personality scores in the UK may be lower than in other countries.

#### Limitations

These include but are not limited to; whether any personality construct can be measured; issues associated with socially desirable responses to self-report questionnaires; and sample size.

#### Research/Practical Implications

Proactivity of students can be measured enabling universities to identify which interventions, if any, are more effective in enhancing this important employability factor.

#### Originality/Value

To my knowledge this is the first study of proactivity in undergraduate students in the UK. This research is rare in comparing and contrasting measures of proactive personality and personal initiative.

### **Crisis management: When are female CEOs preferred?**

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#### Purpose

The “glass cliff” phenomenon is that female leaders are preferred in crisis situations (Ryan & Haslam, 2007). Addressing its generalizability across differing crises, we hypothesized that female leaders are preferred only if participants believed that stereotypically feminine skills would foster resolution of the crisis.

#### Design/Methodology

64 U.S. (40% men) and 92 Spanish (70% men) university students indicated the most suitable of each of 14 attribute pairs for a new CEO: male vs. female and, for example, agreeable vs. confident; emotional vs. analytical; and bold vs. careful. The CEO was described as facing each of 9 types of major/minor crisis, 8 due to organizational weakness and 1 to external factors.

#### Results

Overall in both nations, participants preferred male CEOs. However, appropriate comparisons showed that in both nations women were preferred when a crisis was due to a company’s internal disharmony and only in Spain when due to lack of knowledge about customers’ preferences. Further, chi-square analyses indicated that in these “glass cliff” crises, participants preferred CEOs who were agreeable rather than confident and emotional rather than analytical. Other logistic regression and chi-square analyses revealed additional effects of the independent variables.

#### Research/Practical Implications

When crises arise due to problems that people think can be resolved by the exercise of stereotypically feminine leadership qualities, women are preferred as leaders.

#### Originality/Value

The general preference for male CEOs is present in most crisis situations. The “glass cliff” preference for a woman occurs only in specific types of crises that are believed to favor stereotypically feminine leadership skills.

### Employee engagement: Operationalization and testing of a practically oriented model

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#### Purpose

Employee engagement is becoming more and more a significant target figure in organizational contexts and is increasingly often the center of measurement in employee surveys. Nonetheless scientific approaches to operationalization of engagement differ considerably from practitioners' instruments in employee surveys.

Aligning both scientific requirements and practicability is the main purpose of this study. On the basis of the results a theoretically and equally practicable instrument for measuring engagement is developed. Incorporated in this instrument are also important organizational context factors in order to identify most important drivers of engagement within the respective organization.

#### Design/Methodology

Based on previous theoretical approaches and empirical research a new approach to measuring engagement is developed and validated within a large employee survey project at GfK Trustmark. The construct has been measured on the individual as well as group level. In addition also important organizational context factors have been measured and analyzed on both levels.

#### Results

Results confirm the reliability and validity of the operationalization. Overall context factors that influence engagement have been identified. Differences in influences can be observed regarding the analysis level. The differences are moderated by group characteristics.

#### Limitations

The study has been conducted in a cross sectional design. Therefore no final conclusion can be drawn on the actual direction of influence.

#### Research/Practical Implications

The operationalization and the identified impact factors add value to scientific research in the field of employee engagement as well as employee survey practice.

#### Originality/Value

In addition to combining scientific and practitioners' approaches also the multilevel perspective on employee engagement has been taken into account.

### Organizational Commitment: A cross-country study

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#### Purpose

Regarding the human resources of social enterprises (SEs), researchers have mainly inquired workers wellbeing and job satisfaction (Tortia, 2009, 2008). Instead, with few exceptions, organizational commitment (OC) has remained unattended. OC studies have contributed to the understanding of different organizational dynamics. To date, only a short OC measure has been used in the SE research field (Ohana & Meyer, 2010). This study validated an instrument assessing more widely the OC of people working in SEs. Validating a more specific OC measure could allow responding to questions as: are SE workers affectively involved with the organization or their involvement responds to a lack of employment alternatives?

#### Design/Methodology

We conducted a two-country study in order to validate Bentein's et al. (2005) OC measure.

407 colombian workers and 337 italian employees responded to the survey.

#### Results

Four dimensions remained in both samples after conducting a Multigroup exploratory factor analysis. These dimensions correspond to those of the original measure.

#### Limitations

Further studies should inquiry on the relationship between OC and other organizational variables.

#### Research/Practical Implications

These results could help researchers and practitioners to measure and compare different types of commitment among people working in SEs. This differentiation can support the implementation of ad hoc strategies to enhance OC within SEs

#### Originality/Value

Conversely to prior cross-country studies on OC (Vandenberghe et al., 2001), our sample included a non-european country. Most cross-country studies are confirmatory in nature, leading to validation bias. To our knowledge, no exploratory cross-country studies have been conducted in the SE research field.

### **Theory-practice transfer – Communicating knowledge to HR manager**

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Theory-practice transfer is a main duty of applied science, and especially of work- and organizational psychology. Hence, scientists need differentiated insights about the ways HR manager seek for knowledge to use these ways in an optimal manner. Thus, we asked N = 169 HR manager in a web-based study how they gather new knowledge for their professional work, which kind of publications they

receive, and which information formats they preferred. Our results show, that their daily work is more based on facts from personal experiences than on scientific results. But science can give a direct input to the two most used ways of further education: Journals and books as well as web-based publications. Third most important for HR manager are workshops, where science can give inputs only indirectly. We took a deeper look at four forms of publications: Books, journals, newsletter and websites. Participants in our study stressed the importance of practical applicability and actuality of contents. Publications written in the own mother tongue are clearly preferred. Furthermore, HR manager are more in favor for authors with an applied background and less for the ones working in science. Additionally, we found some differences based on the kind of academic studies HR manager had experienced. Our result show, that typical publication formats of the scientific community are not fulfilling typical needs of practitioners in the field. Thus, there seems to be a need for a second publication of applied research besides typical scientific journals – if one is interested in communicating scientific facts to the people working in the field.

### **From the first to the third mission of university: Beliefs and representations of Italian students**

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#### Purpose

Universities are undergoing many changes that aim to modernize them and consolidate their third mission: community development. However there are very few studies on the image and reputation of University as an institutional organization. This paper investigates if beliefs and representations of students (of

different gender, age and education) about university are similar to aims and activities expected by official legislative documents.

#### Methodology

A survey was conducted on 173 students (85% master courses' and 58% psychology's students) from different Italian universities. The questionnaire included: a) knowledge items on the Italian university system, b) free association questions, c) attitude to university and d) beliefs about aims, partners and collaborations of Universities.

#### Results

Most mentioned words related to university are: studying, research, training, culture, knowledge, with no reference to the community. Results report an image of Italian university as static, not innovative and unable to cooperate with the community; other public institutions are in fact considered the main partners of universities. Traditional prescribed activities of universities are known to students that believe that these activities are not well pursued in daily practice. Limited differences are observed among types of faculty and seniority.

#### Limitations

Students belong to a limited variety of university discipline; exploratory study.

#### Implications

Although students are the 'first customers' of universities, they do not have a positive attitude toward university and are almost unaware of changes that universities are introducing. The third mission has to be consolidated and better communicated to students.

#### Value

Students opinions are important because they are an important partner in reaching and pursuing community development.

### Human values, well-being, and career exploration in Portuguese youths

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This study explores the relations between human values, well-being and career exploration of Portuguese youths. Participants were 577 youths (304, 52.7% girls), between 12 and 27 years old ( $M=16.91$ ;  $SD=1.940$ ), who are attending elementary (17,2%), secondary (80,4%), and college education (1%). They answered the satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen & Griffin, 1985), the Basic Value Survey (BVS; Gouveia et al., 2009), the Career Exploration Survey (CES; Stumpf et al., 1983 adap. por Taveira, 1993) and a set of demographic questions. Results show positive correlations between human values, well-being and positive beliefs, process and reactions to career exploration. Specifically, values with social orientation and idealistic motivation show better and positive correlations with well-being and with the career exploration and career decision' stress than others orientations and motivations types of values. However the well-being shows better correlations with the amount of career information and the satisfaction with the exploration process and low or no correlations with the stress with de career exploration or decision.

Based on these findings, implications are drawn for the further theoretical and practical development of this line of research, especially from the design of educational and organizational researches and interventions that encourage youths to consider their values in their careers management to obtain satisfaction in their lives.

### **Business processes in complex environments**

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#### **Purpose**

In order to meet market needs, organizations must present innovations. These tend to be increasingly complex products or product service systems. Consequently, business units involved in innovations closely interact with various units within the organization, and with external providers and users. To effectively handle this complexity, the implementation of structured, cyclical business processes is necessary. However, these processes can only be efficient and supportive for the management of complex endeavours, if they are accepted and consistently used by employees. This study addresses the questions: How to design business processes in complex environments that are accepted and effectively implemented? How can business processes be sufficiently flexible for adaptive innovation and at the same time reliably structured to cater for complex environments?

#### **Design/Methodology**

Semi-structured interviews (N=27) were conducted with managers (product development) of a large international organization in the automotive sector.

#### **Results**

Process characteristics (e.g., balance between flexibility and stability), and employees' process-knowledge about their role in the entire system are regarded as key parameters that impact process acceptance and applicability.

#### **Limitations**

Quantitative research should build on the findings to systematically test relationships

between the parameters identified and organizational performance measures.

#### **Research/Practical Implications**

Employees need a clear understanding about the additional value of the process and an overview of the existing process landscape when using cyclical business processes in complex environments.

#### **Originality/Value**

This study addresses business processes not only from a managers' perspective (applicability) but also focuses on employees' perceptions from a psychological point of view (acceptance).

### **Career advancement of Indian males in corporate South Africa**

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#### **Purpose**

In South Africa progress has been slow with whites dominating managerial positions (Department of Labour, 2011). Employers are more likely to promote white males and females than Indian males. In trying to understand why the progress of Indian males toward managerial positions is so slow the research focuses on the challenges Indian males face in the South African workplace and how they negotiate their identities in the process. This study represents one of the first of its kind to illuminate the life and career journey of Indian males in management. It focuses upon the challenges Indian males encounter in their upward mobility.

#### **Design/Methodology**

An interpretivist, grounded theory approach focusing on the life stories of Indian males is used. In-depth, semi-structured interviews are being conducted with Indian males.

**Results**

Results will be available at the conference as interviews are still being conducted with Indian males.

**Limitations**

Only males at middle, senior and top managerial positions are interviewed. Aspirant male managers do not form part of this sample.

**Research/Practical Implications**

Will be determined after the interviews are analysed.

**Originality/Value**

To my knowledge the career advancement of minority males, one such group being Indian males has not been studied in post-apartheid South Africa.

### **Work and integration: A research on Latin American immigrants in Italy**

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**Purpose**

Immigration represents a great resource for countries and populations, if an adequate process of integration supports it. Despite the existence of vast literature on immigration, given the complexity of this phenomenon, there are still many areas to be explored in order to find ways of integration. Moving from the assumption that qualitative methodologies are necessary to establish a relation with immigrants with very different life stories and little knowledge of the Italian language, we explored their perceptions and attributions, with the aim of testing three hypotheses: 1) Work is considered a fundamental factor for integration 2) Working situation is only partially evaluated on the basis of retribution 3) The relevance attributed to integration is related to the length of the immigration project.

**Design/Methodology**

The research is explorative. 34 Romanians immigrated in Italy were interviewed. The interview was semi-structured, with a specific focus on migration projects, evaluations about participants' work situations and expectations. Interviews were taped and transcribed. Content analysis was performed.

**Results**

The hypotheses were confirmed. A vast amount of rich information about immigrants' attributions and expectation also emerged.

**Limitations**

The research is based only on immigrants of Latin American origin, chosen as they represent a very relevant community in Italy.

**Research/Practical Implications**

The result of this study can orient integration programs, as well as further research on other groups and with other instruments.

**Originality/Value**

The qualitative methodologies used allowed to obtain information from a group that is hardly reachable. The results have a strong potential value in enhancing immigrants' integration.

### **Drop out from higher education: A contribution to the reformulation of Tinto's model of student attrition**

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**Purpose**

The aim of this research is to validate Tinto's model of students dropout in the Italian context. According to the author, intention to quit is predicted by a complex set of variables including: pre-entry attributes, initial commitments, institutional experience, integration and subsequent commitments. For the aims of



this study, participation to community learning activities has been added. Community learning are a very important educational tool adopted in American, Australian and European universities to prevent dropout and to promote academic success.

#### Design/Methodology

The sample is formed by 227 freshmen students attending a class in work and organizational psychology at the University of Bari.

Two questionnaires were administered: one at the beginning of the experimentation phase and the other at the end of the sessions. Results partially confirmed the model revealing the causal relationship between integration, commitment and persistence intentions.

#### Results

A surprising result was the non significant relationship between initial commitments and academic performance and the relationship between academic performance and integration. Those differences were put in relationship with the different educational structure of the Italian university with respect with the American one.

#### Limitations

Limitations of the study were the excessive uniformity of the sample of participants made up exclusively by psychology students.

#### Research/Practical Implications

Practical implications of the study could be to set up formal and informal academic actions to limit dropout intentions and to promote student success.

#### Originality/Value

The added value of this research was to include participation to community learning to Tinto's model in order to test its eventual relationships with the other variables.

### **The development of a self-constructed scale of quality of life for persons with intellectual disabilities**

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#### Purpose

The aim of this study is to develop and to validate a self-constructed scale of Quality of Life for persons with intellectual disabilities.

#### Design/Methodology

Focus groups were set up with professionals in order to construct the items of the scale. A scale of 20 items was built by consensus. 100 organizations participated in the study and 1195 tutors answered the questionnaire.

#### Results

EFA recommended deleting 3 overlapped items. A final scale of 17 items ( $\alpha=95$ ) composed by four main dimensions (self-determination, social inclusion, rights and family support) that explained the 74.83% of the variance. Convergent validity and discriminant validity were satisfactory. Moreover, CFA confirmed the structure of the scale.

#### Limitations

The study has some limitations. For example, the instrument assumes that scores of Quality of Life perceived by tutors and familiars is invariant depending the observer. Moreover, it would be necessary to collect longitudinal data to confirm the validity over time.

#### Research/Practical Implications

It provides a measure of Quality of Life for persons with intellectual disabilities oriented to assess quality of life of persons with intellectual disabilities that are users of different centers that is perceived by their tutors and/or families.

#### Originality/Value

This scale has the peculiarity of taking tutors and/or families as main evaluators to assess

the quality of life of the persons with intellectual disabilities. This fact increases the objectivity of the information because an external subject provides the information. At the same time, this scale is complementary to previous scales and it enriches the information related to the quality of life.

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