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Innovative work behavior (defined as "the intentional introduction and application within a role, group or organization of ideas, process, products or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, the group, the organization or wider society" West & Farr, 1990, p. 9) has been shown to be key for organizational effectiveness and competitiveness.

In the last 30 years, research on innovative work behavior focused its interest in different research lines, showing a distinction between creativity and innovation, studying the multistage process of innovation, discovering the antecedent factors of innovation, and

identifying the multiple factors that help and hinder innovation at individual, group and organizational levels. Regarding this last point, Anderson, De Dreu, & Nijstad (2004) summarized a set of factors, at individual, group and organizational level that have been found to be supportive or inhibitive of innovative behaviors.

The literature review reveals how the socio-demographic variables (with the only exception of the educational level, in work group level research) have been only considered as control variables, paying less attention to other possible relations with the innovative work behavior. Nevertheless, the last decades of organizational diversity literature underline the importance to consider the impact that individual characteristics in interaction with socio-demographic variables have on group and individual level of performance, such as innovative work behavior.

In contrast, trying to extend previous literature, the objective of this paper is to reconsider the role between the socio-demographic variables and the innovative work behavior. To achieve this objective, we will consider innovative work behavior as multistage process (Anderson et al., 2004; Janssen, 2001, 2003; Scott & Bruce, 1994) composed by different specific behaviors in each stage. Within this framework, following the suggestion of Bledow, Frese, Anderson, Erez, & Farr (2009) we will consider how *multiple pathways* can lead to innovation in term of generation and implementation actions; specifically, we will study how socio-demographic variables (age, tenure, education) in interaction with contextual factors as types of organizations (private, public, size of enterprises, sectors) and some individual factors (e.g., organizational commitment) will favor innovative work behavior.

We will present results from a sample of 2500 employees coming from 22 organizations (small and medium) from different sectors (services, health, education, manufacture). Theoretical and practical implications will be discussed, highlighting practical recommendations for human resources management.

Creativity as Self-Expression

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Introduction. We develop a functional explanation of the personality processes that characterize highly creative people. According to this explanation, the activation of the self-system is a critical mechanism underlying creativity (Kuhl, 2000). The self-system is as an associative memory structure that evolves from a person's learning experience and that is closely linked to affective-motivational processes. High creativity in work settings results if there is a high chronic activation of the self-system and if the work context allows for the expression of the self-system. This should be the case if a person displays positive core-self evaluations and has high autonomy at work. Moreover, activation of the self-system is closely linked to the regulation of negative affect. On the one hand strong negative affect impedes self-expression, on the

other hand negative affect can lead to high activation of the self-systems if a person can successfully down-regulate negative affect. In that case, particularly high levels of creativity can result (Bledow, Rosing, & Frese, 2012). We explore consequences of this double-edged nature of negative affect by examining individual differences in explicit as well as implicit negative affect and their interactive and non-linear relations with creativity.

Method. We tested the theory in a sample of 215 Belgian employees. We measured core self-evaluations as an indicator of the chronic activation of the self-system, the work characteristics control and complexity, and explicit as well as implicit positive and negative affectivity. Supervisors provided ratings of incremental and radical creativity to allow for a differentiated test of our hypotheses.

Results and Discussion. Multiple regression analyses showed support for the assumed moderation of autonomy on the relation between core self-evaluations and radical creativity. Moreover, a differentiated picture of the relation between negative affectivity and radical creativity emerged. In sum, radical creativity was highest if there were moderate levels of explicit negative affect and low levels of implicit negative affect. Results further revealed that the affective-motivational antecedents of incremental and radical creativity were distinct. We discuss results against the background of personality-systems-interaction theory and outline implications for the management of highly creative people.

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Trust and Monitoring dynamics in project teams: A longitudinal study of climate for innovation and team performance

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Trust is a dynamic phenomenon recognized as key to the functioning, climate and performance of individuals working in teams. The benefits of trust have been demonstrated in relation to increases in positive workplace behaviors, attitudes, better team processes and superior levels of performance (Costa, Roe & Taillieu, 2001; Davis, Schoorman, Mayer & Tan, 2000; Dirks, 1999; Klimoski & Karol, 1976; McAllister, 1995; Smith & Barclay, 1995). While much has been written about trust over the past years, only a few studies (e.g. Costa, Bijlma, DeJong, 2009; Serva, Fuller & Mayer, 2005) have studied trust as a dynamic phenomena and empirically examined its increase or decline over time. As Lewicki, Tomlinson & Gillespie (2006) note, most trust research has been characterized by static "snapshot" studies which to some

extent provide limited insight into its dynamic nature. The persistent apparent relationship between trust and performance makes it important to understand how trust is developed and maintained as individuals work together. This study takes a longitudinal approach to trust in the context of design-project teams. The main aim is to get insight into the dynamics of growth and decline of trust and monitoring and its relation with team climate for innovation and team performance.

In this study the focus is on intra-team trust, and the basis for our conceptualizations is the framework developed initially by Mayer, Davis & Schoorman (1995) and later validated by Serva, et al. (2005), where trust can be defined as "a willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that party" (Mayer et al., 1995, p.712). In the specific context of promoting team innovation, empirical results have identified the roles of developing a climate of trust and openness, vision and shared objectives, team collaboration, and the team's belief in its potency to perform well and attain its goals (Drach-Zahavy & Somech, 2001). One of the most studied theories of climate for innovation is West's (1990) four factor model for team innovation. According to this model there are four main factors that are essential for a team to be innovative, i.e. vision, task orientation, participative safety and support for innovation (West, 1990; Anderson & West, 1998). The underlying principle is that innovation requires not only technical competence, but also a nurturing climate, management commitment and collaborative relationships calling for an extraordinary degree of trust among the members (Anderson, DeDreu & Nijstad, 2004; Costa & Anderson, in press; Van der Vegt & Janssen, 2003). Without trust shared norms of behavior, sharing knowledge, combining skills, and collaboration between individuals are likely to be difficult and unproductive in any team context. Regarding team performance, trust has been often mentioned as one of its important determinants. However, some inconsistencies have been found regarding this main effect of trust on performance (Dirks & Ferrin, 2001). Following Hackman (1987) this study examines different aspects of team performance including the quality of the outcome, in this case the innovativeness of the product, the state of the group as a performing unit, i.e. overall performance, level of knowledge transfer and satisfaction with group progress.

Data from 63 design-project teams reveals that in general 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. This is consistent with previous studies (e.g. Berg et al., 1995; Costa, et al., 2009; Kramer, 1994) which partially contradict the argument often suggested that trust develops gradually over time (e.g. Rempel, Holmes & Zanna, 1985; Zand, 1972).While this dynamic pattern appears not to have a direct effect on overall team performance, the results show that 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 stages of the project. At the middle of projects climate is related to indicators such as knowledge

transfer and satisfaction with the team progress whereas at the end of the projects is related to the overall performance and product innovativeness.

To conclude, initial analyses so far suggest several promising findings and lines for further quantitative investigation. Crucially, trust predicted facets of team climate that, in turn, predicted variance in the important independently evaluated outcome variables of knowledge transfer, satisfaction with team progress, overall performance and product innovativeness. Few published 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.

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Pursuing radical or incremental ideas: A within person perspective on the boundary conditions of creative self-efficacy.

Toon Devloo, Frederik Anseel, & Marjolein Feys

Over the past decade, a broad range of organizations and industries have become increasingly interested in exploring and developing the creative potential of their workforce as a source for innovation. A promising strategy to foster individual creativity is the formation and

development of one's creative self-efficacy which refers to the beliefs that people hold concerning their capacity to produce creative outcomes. Although there is a growing body of research that has provided compelling evidence for the predictive role of creative self-efficacy on creativity, the relations reported in previous studies have not always been consistently strong. This raises the question of whether unidentified moderators might influence the relationship between creative self-efficacy and creativity.

The purpose of the present study is to further elaborate on the role of creative self-efficacy as a key driver of creativity by taking a within-person level approach. To provide a more fine-grained framework in which the hypotheses of this study can be developed and tested, we distinguished between two types of creativity; radical and incremental ideas. It was our contention that the unique relationship between creative self-efficacy and both types of creativity is subject to distinct boundary conditions. First, we proposed that strong feelings of psychological idea ownership impedes the relationship between creative self-efficacy and radical creativity (Hypothesis 1). More specifically, we expected that psychological idea ownership elicits a protective attitude towards one's own ideas, and therefore diminishes the tendency of self-efficacious individuals to seek valuable informational input within their environment which is particularly important for the production of radical new ideas. Second, we hypothesized that the extent to which individuals expect that their creative efforts will lead to desirable outcomes (e.g., reputational benefits), strengthens the relationship between creative self-efficacy and incremental creativity (Hypothesis 2). We argued that the interaction between creative self-efficacy and outcome expectancy stimulates perseverance and sustained effort, which has previously been demonstrated to be conducive for the generation of incremental ideas.

The lagged relationship between week-level creative self-efficacy, the potential moderators (i.e., psychological idea ownership and outcome expectancy), and creative idea production (i.e., incremental and radical ideas) were investigated by adopting a longitudinal survey design with 13 weekly measurement waves. The sample of the current study consisted of 35 final year students that were involved in a long-term industrial product design project based on a real-life case.

Given the fact that our dataset consisted of repeated week-level measurements (N = 347) nested within 35 individuals, we used hierarchical linear modeling (HLM 6) to test our hypotheses. The within-person analyses supported both moderation hypotheses: (1) weekly levels of creative self-efficacy were stronger associated with the production of *radical* ideas during the subsequent week, when individuals experienced low levels of psychological idea ownership; (2) weekly levels of creative self-efficacy were stronger associated with the production of *incremental* ideas during the subsequent week, when individuals expected that their efforts would lead to desirable outcomes. Implications for theory and practice based on these results will be discussed in the full version of this manuscript.

Keywords: Creative self-efficacy; Psychological idea ownership; Outcome expectancy; Radical & incremental creativity

What Makes Creative Teams Tick? The Role of Social Resource Development, Collective Task Engagement and Team Creative Performance over Time.

Toon Devloo, Marisa Salanova, Alma Rodríguez-Sánchez, & Frederik Anseel

To date, a variety of motivation theories have substantially impacted employee creativity research, with the intrinsic motivation perspective being one of the most influential theoretical frameworks. However, despite the central role attributed to motivational strivings for

individual creativity in past creativity research, it remains unclear whether and how intrinsic task motivation at a collective level influences the creative performance of project teams. In recent years, scholars have begun to identify potential team-level determinants (e.g., team creative efficacy, team-level information processing, intergroup competition), but a clear model of how a collective task motivational state relates to team creativity and its link to previously identified antecedents is currently lacking.

The present study proposes a research model to examine the motivational potential of team social resources at a task level for teams conducting creative activities. Extending the job demands-resources model framework to the team level, a reciprocal process was expected to unfold over time: (1) team social resources lead to collective task engagement which in turn has a positive effect on team creative performance (i.e., in terms of perceived team performance and independently rated creativity), and finally (2) perceived team creative performance predicts future team social resources.

The current study relied on a three-wave longitudinal organizational simulation exercise, in which 118 project teams (i.e., 605 individuals; students, full-time workers, unemployed people) conducted three creativity tasks. After each task, participants completed a questionnaire that assessed the study variables. Additionally, task output creativity (i.e., in terms of novelty and usefulness) was assessed by three external coders. Structural Equation Modeling was used to test our hypotheses. The results generally supported our hypotheses: (1) Positive associations were found between team social resources and collective task engagement, and between collective task engagement and team creative performance; (2) cross-lagged effects were observed of perceived team creative performance on team social resources as measured at each subsequent task episode.

Collective task engagement and team creativity have a dynamic nature with complex relations that should be studied longitudinally. Specifically, we found that collective task engagement is an important underlying motivational mechanism that stimulates a team's creative performance over time. Furthermore, our findings suggest that team resources can initiate motivational gain cycles across time which may be particularly important for teams that are involved in creative activities.

Keywords:
Team resources, Collective task engagement, Team creativity, Longitudinal

The Informal Organization and its Effects on Innovation Capabilities

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This paper addresses the relationship between the human or informal organization, and corporate innovation. The first one is defined as the presence of an informal structure, socially constructed and maintained, created by the unofficial relationships within the work group (Roethlisberger & Dickson, 1939).The second one attempts to identify changes that improve organization productivity and performance, understanding that each organization has characteristics that facilitate or hinder innovation as a natural, continuous and assimilated process. (Sullivan, 2001).The process of making incremental and sustainable innovation is enabled by the set of informal routines of the organization (Bessant and Francis 1999). Proposed is a methodology based on the Congruence Model of Organizational Behavior of Nadler and Tushman, which takes into account the results from a multilevel perspective analyzing the individual, the group and the organization (Kozlowski and Klein, 2000). Identified for each one of the three are informal organization factors associated to innovative performance: antecedents and consequents, both as consistent background. At the organizational level, proposed as antecedents of innovation, and based on the OCAI model (Cameron and Quinn, 1999; Naranjo, Sanz, and Jimenez 2010), are: organization sector, size, structure, prevailing organizational culture, and organizational learning strength. Proposed as consequents are: economic profitability and organizational perception. At the level of groups, analyzed as innovation antecedents are: leadership, team composition, processes, and group states (González-Romá, 2008). Analyzed as consequents are: group cohesion, and team power and performance. Proposed as antecedents of individual creativity at the individual level are: self-perceptions of the functional role, and the perception of the functional role from peers, as well as the individual's capability for psychological growth (Belbin, 1983; Amabile 1996; Basadur ,2004); As consequents: the perception of role stress, of self-efficacy and of job satisfaction. Process appropriation or interiorization is also considered a mediator between the increases of the intention to innovate and to be creative, and the consequences at the group and individual levels. Trans-level relations are found between individual creativity and team innovation, and between the latter and organizational innovation. Another trans-level influence is hypothesized between organizational learning and the perceived variables of organizational support, psychological climate, and organizational commitment (Tormo and Osca, 2011). Furthermore, the model considers organizational climate strength as a modulating element of these relations at the three levels. A pilot study application was conducted with Colombian companies of different sizes and from different industry sectors to validate the model,.

Keywords: Innovation Capabilities, Informal Organization, Conceptual Model, Organizational Behavior

Factors influencing Individual Innovative Behaviors in Inter-firm Governing Teams: a multilevel study

Authors: Simone Donati, Vicente González-Romá and Salvatore Zappalà

Introduction

Inter-firm collaboration (i.e. Joint Ventures, Alliances and Consortia) requires a "control room" in order to coordinate and manage joint inter-firm actions. The *Shared Participant Governance* (SPG) (Provan and Kenis, 2008) is an inter-firm governance system that involves a team situated across the partner firms' boundaries and composed of representatives from the involved firms. This team has to create and implement new solutions in order to solve the problems that arise from an interorganizational environment and complex inter-firm task execution. The success of the team depends, to a great extent, on the team members' innovative behaviors. Therefore, the goal of this study is to examine whether a number of team process variables are related to team members' innovative behaviors.

Theory

Our research model adopts a Multilevel Approach and hypothesize that some team process variables (Team Communication, Leadership and Trust) influence team members' *Individual Innovation Behaviors* (IIB). In particular, the study aims to ascertain whether density of the intra-team communication network, Trust in the Team (TT) (Costa & Anderson, 2011), and Team Shared Leadership (TSL) (Muethel et al., 2009) foster the IIB among teammates.

Participants, Research Method and Data Analysis

A questionnaire was submitted to 101 subjects that were members of 28 SPG teams. A cross-sectional research design with distinct sources of information was implemented. Density of the intra-team communication network was measured by means of Social Network Analysis (Scott, 1997). TT and TSL were measured by means of questionnaires and aggregated to the team level. IIB were measured through the team members' (self-reported) evaluations on the Holman et al. (2005) scale.

Main Results and Conclusions

IIB were affected by team and individual level variables. Density of the team communication network was positively related to IIB. Individual perceptions of TSL and the TT were also positively related to IIB. These results showed that a complex array of individual and team factors seem to play a role in the enactment of IIB by members of teams governing inter-firm collaborations.

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How to balance flexibility and stability: Routines for innovation teams

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Software development teams need to deliver innovation under high levels of uncertainty with regard to requirements, resources, tasks and output (Dönmez & Grote, 2013). These uncertainties need to be managed effectively, taking into consideration that elimination of uncertainty is sometimes neither possible nor desired (Grote, 2009). Software development teams need to harvest present and future opportunities, e.g., by delaying design decisions as far as possible (Poppendieck, 2009; Habermann et al., 1976), but also by mitigating potentially negative impacts, e.g., during the collection of product requirements (Smith & Rhodes, 1992). Effective uncertainty management requires teams to balance activities that aim at increasing stability and flexibility (Grote, Kolbe & Waller, 2012). Stability enhances predictability and control while reducing the need for ad-hoc coordination, and is generally created through routines, standardization and formalization. Flexibility is required to react quickly and adaptively to dynamic environments, and is based on mechanisms for the exploration of creative solutions to complex problems. However, there are still many unexplained details regarding factors that facilitate these mechanisms. Also, the very conceptualization of flexibility and stability as opposite ends of a single dimension has recently been challenged (Grote et al., 2012), and it has been suggested that both may be increased simultaneously (Farjoun, 2010).

We chose a qualitative **research design** to explore innovation in 8 small teams (5-12 members) that employ agile software development. Agile software development is particularly suited to exploring the interplay of stability and flexibility enhancing mechanisms in uncertainty management because it combines highly structured project management with maximum openness regarding development content and outcome. In 35 interviews with team members and team leaders we focused on requirements for and mechanisms of team coordination and leadership that contribute to stability and flexibility and support creative processes as well as adequate uncertainty management. In addition, we collected project artifacts including documents and project performance data.

Our **findings** support the claim that flexibility and stability can be enhanced simultaneously, and reveal that the potential to innovate is supported by flexibility enhancing team characteristics such as decision making autonomy and task sharing, but also by stability enhancing mechanisms including team structures that define the scope of team member roles and responsibilities. Furthermore, we found facilitating effects of team and project characteristics on innovativeness; e.g., creativity was observed predominantly in teams with higher autonomy and shared leadership.

Limitations of our study are introduced by the small number of teams studied. By visiting the teams multiple times in their work environments and speaking with several members and project managers to enhance our understanding of the projects, we hope to have adequately captured processes in the studied teams. While the generalizability of our results still needs to be established in future work, **implications** for a

wide range of innovation teams can be anticipated already. As flexible and iterative approaches are increasingly implemented across different product development projects (Le et al., 2012), we expect that results will be transferrable to other innovation teams in and beyond the software developing industry.

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Team climate for innovation as a moderator of the engagement – performance link

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Introduction

Both consultancy firms and scientific evidence claims that a link exists between employee engagement and job and business performance (Schaufeli, 2013). However, the possibility that the relationship between work engagement and performance varies as a function of a moderating variable has been overlooked (Alfes, Shantz, Latham, 2013). This study examines the moderating role of team climate for innovation on the relationship between employee engagement and individual performance (operationalised as problem-solving behaviour). It might be expected that this relationship is stronger in those work units in which a higher climate for innovation exists.

Our hypotheses are that: individual engagement will be positively related to solving problems behavior (Hypothesis 1); it also may be expected that team climate for innovation (unit level) encourages employee problem solving behaviors (individual level) (Hypothesis 2), and that team climate for innovation strengthens the relationship between engagement and problem solving behavior at the individual level (Hypothesis 3, moderation cross-level effect).

Design/Methodology

The sample consisted of 310 front-line employees (receptionists and waiters) nested in 117 teams in Spanish hotels and restaurants. Multilevel analyses of direct effects and moderation were conducted with HLM7. Two different sets of analyses are run for the core dimensions of engagement (vigor and dedication) rather than an engagement single score, following the recommendation to uncover potential differential consequences of the different engagement dimensions (Schaufeli, Bakker, Salanova, 2006).

Results

Preliminary analyses show that service employees (1) experiencing more engagement (vigor and dedication) and also (2) members of teams with higher levels of climate for innovation undertake more problem solving behaviors (Hypothesis 1 and 2 confirmed).

Regarding hypothesis 3, the moderating role of Climate for innovation on the engagement-performance link shows a different sign of influence for vigor (negative moderation) and dedication (positive moderation). According to our results, vigorous employees undertake more problem-solving initiatives when they work in a non-innovative context (low climate for innovation). Taking into account that vigor describes high levels of energy, mental resilience, and the willingness to invest effort in one's work, our results may suggest that employees try to compensate for the lack of contextual effort on innovation through an increased individual effort. This underlines the persistence in the face of difficulties aspects of vigor.

On the other hand, climate for innovation enhances the link between dedicated employees and their problem – solving behavior. Dedication refers to being strongly involved in one's work and experiencing a sense of significance, enthusiasm, inspiration, pride, and challenge. Our

results point out that working in a context of a high climate for innovation would boost the dedication (pride and challenge components) and consequently increase employees' problem-solving behavior.

Limitations. Results are preliminary and based on cross-sectional data and one informant only.

An interview-based study of professional creative activity with inter-domain comparisons

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From a cultural psychology perspective, culture exists not only at the level of national units but also at the more basic level of communities within nations. Professional groups are a good example of cultural communities. Creativity "uses" culture to "produce" culture (Glăveanu, 2011). Artists, designers and scientists represent distinctive professional cultures associated with recognized forms of creative activity because the expression of creativity appears to be culture-specific (Bhawuk, 2003; Lubart, 1999; Weiner, 2000). The research presented here explores the main factors required for creative expression in art, design and science. This aspect was investigated with the help of a questionnaire completed by 65 recognized French creators. Creative expression, in terms of outcomes, shows similarities but also differences between art, design, and science. Findings are interpreted in light of cultural and contextual influences and three types of professional cultures that foster creativity will be discussed based on the systemic model of creativity (Feldman, Csikszentmihalyi & Gardner, 1994). In the end, practical suggestions to improve creativity and innovation management will be offered in this communication.

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Uncovering the dark side of innovation: The influence of the number of innovations on work teams' satisfaction and performance through negative team mood

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In order to adapt to, and operate in, a changing environment, organizations need to innovate on a steady basis. This is why innovation is considered a desirable and positive phenomenon in organizations. Consequently, the scientific literature on innovation in organizations has been focused on ascertaining its antecedents and facilitators. Thus, innovation has been mainly considered as a dependent variable. Much less attention has been devoted to examine the consequences on innovation. This gap in the literature is important. If innovation has dysfunctional consequences, we need to identify them in order to prevent and mitigate their associated effects. Moreover, to have a more comprehensive understanding of innovations in organizations we need to extend its nomological network by including some of its potential consequences as well. The goal of this study is to ascertain whether the number of innovations implemented in work teams is related to subsequent negative team mood, collective satisfaction and team performance. We argue that implementing innovations in teams involves an increase in their workload, and an augment in the uncertainty experienced by team members. These experiences foster negative team mood (e.g., tension). Therefore, we hypothesize that the number of innovations implemented in the team is positively related to negative team mood. Moreover, we posit that the latter variable is negatively related to collective satisfaction and team performance. Thus, we expect an indirect relationship between the number of innovations and collective satisfaction and team performance, fully mediated by negative team mood.

The study hypotheses were tested in a sample of 89 bank branches belonging to two organizations. Data were collected at three distinct time points from different sources. At Time 1, branch managers informed about the number of innovations implemented in their teams in the last year. Six months later (Time 2), we gathered data on negative team mood from branch employees. At Time 3 (1 year later), data on work satisfaction was collected from branch employees, and ratings of team performance were collected from both branch managers and employees.

The results obtained by means of hierarchical multiple regression showed that, after controlling for organizational membership, team size, and team tenure, the number of innovations implemented was positively related to subsequent negative team mood (beta=.31, $p<.01$), which in turn was negatively related to subsequent collective satisfaction (beta=-.43, $p<.01$), team performance as rated by branch managers (beta=-.37, $p<.01$), and team performance as rated by branch employees (beta=-.26, $p<.05$). We tested the hypothesized mediated relationships using the product of coefficients method proposed by MacKinnon and colleagues (2002). This method provides satisfactory statistical

power and accurate Type I error rates. The three indirect effects involved were statistically significant. Therefore, we concluded that the number of innovations implemented showed a negative indirect relationship with collective satisfaction and team performance mediated by negative team mood.

Innovation and Employee Burnout for Survivors of Downsizing

Michelle Hammond, Christine Cross, Dawn Eubanks

Purpose

Downsizing and redundancies are used by employers in this ever increasingly competitive economic environment as a mechanism to reduce the costs associated with employee headcount. In the current global economic climate redundancies have become the norm rather than the exception. Yet the achievement of new strategic direction and organizational goals depends on the survivors' attitudes, commitment and motivation levels (Vinten & Lane, 2002; Littler, Wiesner & Dunford, 2003). Further, innovation has become of increasing importance in times of downsizing as a competitive advantage; however innovation may decline following downsizing (Amabile & Conti, 1999, Mellahi & Wilkinson, 2010). However, we know very little about the effects of innovative behaviors on employee well-being in times of downsizing. The purpose of this paper is thus to examine a moderator of the innovation-burnout relationship: employee voice costs. It is proposed that when employees feel a high cost associated with speaking up in the organisation, innovation will be positively related to burnout.

Design/zethodology

One hundred eighty two employees of organisation in which downsizing had occurred participated in the internet-based survey.

Results

Whereas there was no direct relationship between innovation and burnout, voice cost moderated the relationship between innovation and burnout. As illustrated in Figure 1, individual innovation was negatively related to burnout when voice costs were low. When voice costs were high, there was no relationship between innovation and burnout.

Limitations

Our study is limited by a small sample size and cross-sectional data.

Research/Practical Implications

Our findings have implications for the study of innovation within the context of downsizing.

Originality/Value

This study is one of the first to simultaneously address innovation and well-being within the context of survivors of downsizing.

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Emergent innovation as socio-epistemological process of knowledge creation

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While classical approaches to innovation follow the idea of creating and projecting a high quantity of ideas and then selecting them, the Emergent Innovation approach (Peschl & Fundneider 2008) follows a radically different strategy based on Scharmer's (2007) Theory U: "Learning from the future as it emerges". It is a socio-epistemological technology leading to innovations from within; which are radical, yet "organic innovations" in the sense of both respecting and developing/changing the core/essence of the innovation-object (be it an aspect of society, business, service, product, idea, etc.). Our cognitive processes enable us to intellectually deeply penetrate our environment in order to achieve a profound understanding thereof. In this process one may also acquire knowledge about the potentials that are not yet realized. The potentials might emerge in the future and need to be discovered, developed, and cultivated. It is these potentials which lead to "emergent innovations" by following a process of suspending, redirecting and reframing one´s perspectives and patterns of thought, letting them go, entering into a space
of silence and into a process of listening to what wants to emerge ("presencing"), crystallizing, and prototyping. For investigating these phases more thoroughly we followed a radically interdisciplinary approach. PhD students from two universities studying in the technical fields, business studies and humanities were led through this process of knowledge creation in the frame of three joint university courses (N=30). Thus,
participants varied highly in terms of disciplinary background, nation, gender, and age. They had to work in teams on projects which have emerged as fields of joint interest for several months. Motivation was high among the groups as they needed the grade to complete their studies. This setting allowed us to observe the theoretical models in the practical context of innovation processes. We analyzed the interrelation of group dynamics and knowledge creation in the context of innovation processes on several levels applying different techniques: (i) the individual level was researched by the use of six individual diary entries after the face-to-face sessions; (ii) the team level was accessed by the diary
entries, three group coachings, passive observations and two team climate inventories for innovation (short version of Anderson & West's (1998) TCI & Kauffeld et al.'s (2004) INNO) filled in four times; (iii) the course level was observed through the method of dialog and passive observations.

As expected, the general findings show that trust is an important value that improves creativity. Surprisingly, at some stages of the process, irritation, uncertainty and even frustration revealed to be driving forces for the creativity and enabled the knowledge creation process. Detailed results about the socio-epistemological interdependencies throughout the investigated phases will be presented in the paper. Getting a deep understanding of emergent innovations is of particular importance for business contexts since organizations strive to find radically new solutions and stable innovation strategies which go beyond incremental innovations.

Intragroup communication, conflict and conflict handling styles: Their interplay in innovation processes

Madlen Hiller, Dorit Hahn, Anne Köhn and Manfred Bornewasser (University of Greifswald)

Achieving organizational innovation is a complex process which requires the collaboration of different disciplines. Frequently innovation teams are specially formed on this purpose. There is contention, that the exchange of different perspectives, experiences and information in groups is conducive to the generation of truly novel solutions. In fact, research has shown that supposed to further increase information exchange and exploration of new solutions. However, empirical evidence has shown that conflict is positively associated to innovation only under very specific conditions. Furthermore, conflict has numerous negative consequences e.g. on employee satisfaction, commitment or organizational citizenship behavior, that its positive effects cannot outweigh. Nonetheless, the occurrence of conflicting ideas and opinions are nearly inevitable when different individuals work on a common task. Most likely disagreements affect the communication of innovation teams. However, this has not been addressed by studies so far. Therefore, the aim of our research is to shed light on the

interplay of task conflict and intragroup communication during innovation processes. Moreover, we examine the role of three contrary conflict handling styles (avoiding, integrating, dominating) on team processes and their outcomes. While former innovation research studied conflict handling styles in dyads or measured perceptions of conflict handling styles on a team level, we are probably the first to consider the constellation of individual conflict handling styles in groups. Design/Methodology In an experimental setting 18 groups worked on a brainstorming and an innovative construction task. Communication during the session was videotaped and coded.

Experimental data were complemented by insights by semi-structured interviews with 20 project managers from different companies (mainly SME). They were asked about typical conflicts in innovation teams. Results Results of the interview show that communication deficits are most frequently seen to be the reason for conflicts during innovation processes. Consistent with practitioners' statements, we find the structure of team communication during the experimental construction task associated with levels of task conflict. Concerning the quality of communication, conflict handling styles are correlated to performance in brainstorming and the construction task. Limitations and future research

Due to the group research design, sample size is low. Further effort to enlarge the sample is planned. Even though the experimental findings are consistent with practitioners' statements, validation of the results with real working teams in their original environment is necessary. Practical Implications Our findings suggest that conflict handling styles are to be considered as an important factor when composing innovation teams. Moreover, implications for the management of innovative team processes will be discussed. Originality/Value This is the first study so far focusing on the interplay of conflict and communication structure in innovative team processes.

Consequences of the demographic change in Germany: Are age diverse teams a solution to enhance the innovation potential?

Anne Köhn, Dorit Hahn, Madlen Hiller and Manfred Bornewasser (University of Greifswald)

The demographic change in Germany will lead to a loss of 6 million skilled employees until 2025. Until 2050 this number will double! Two main consequences can be drawn from this situation: 1) a smaller number of young skilled employees is available on the labor market in the near future and 2) the older employees are forced to work longer until they retire. Against this background many companies face the challenge to maintain their innovation potential or even to enhance it. On the one hand companies must avoid losing the knowledge of employees that go into retirement. On the other hand the knowledge transfer between the generations has to be ensured. At first glance age diverse innovation teams seem to be the solution, especially since innovation processes are mostly carried out by teams. Additionally the cooperation of old and young employees might reduce mental and physical strains of older employees due to their elongated work life.

The goal of our study is first to exam if companies have developed an awareness of the demographic change in Germany and second whether the innovative performance of age diverse team is comparable to the innovative performance of age homogenous teams.

We approached our research questions using two different methods. To access the awareness of demographic change in companies we conducted 20 interviews with CEOs of SME in a structurally weak area in Germany. This area will be strongly affected by the demographic change, because skilled young people living in this area often migrate to structurally strong areas and big cities. Furthermore we carried out an experiment, in which age diverse and age homogenous teams were tested regarding a construction task, where they had to build an extravagant and high building.

Results show that most of the SME in the structurally weak area in Germany are not aware of the future risks and challenges concerning the accelerating demographic change. They do not see ageing as a problem in composing innovative teams. Although older employees are regarded as more stubborn, factors as professional competence and communication skills rather than age diversity are seen as success factors for innovation teams.

Results of our experiment contrast this view. Age diverse teams were more innovative in building extravagant, high buildings and used fewer Lego stones than age homogenous old teams. Age homogenous young teams had a similar performance as age diverse teams. Nevertheless we saw a greater variance in the results of age diverse and age homogenous old teams concerning the performance variables. This means there are some capable teams and some non-capable teams. This is consistent with the fact that the skills and capabilities of older people vary in general and therefore can be trained to maintain their current level or even to enhanced it.
On the basis of the results recommendations for composing innovative teams, recruiting of skilled employees and handling the demographic change are discussed.

Innovation project characteristics as a success factor

Sebastian Kunert (University of Health & Sports Berlin)

How does one best pursue an idea and implement innovations within organizations? Keeping in mind, standardized process models are merely valid we focused on the underlying processes of innovation processes and their organizational conditions. After a pre-study with 44 interviews in 5 companies the most relevant factors were taken into a survey. So far, 329 participants from 28 companies characterized their last innovation project and evaluated the cultural conditions as well as the project success. The results reveal significant characteristics and conditions: The main factor is the time management of innovation projects. Long unplanned delays lower the probability of a success dramatically. Furthermore, a high number of participants within a project and a lack of evaluation at the end are not beneficial for the implementation of innovations. In addition to these correlations, we conducted a structural equation modeling to investigate the relationship between the process and the cultural factors. In the best fitting model the delay is the most crucial success factor. Furthermore, the integration of the person who initially came up with the idea is important as well as a systematic evaluation at the end. The entire results, limitations and practical considerations are presented in this work-in-progress paper.

Innovation in practise: Creating learning for process innovation by expanding Lean

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Efficient production is inter-linked with process innovation and depends on employees' efficacy, psychological ownership of their work, and proactive behaviour. These beliefs, attitudes and behaviours are formed and learned in a context. The overall aim of the study is to identify conditions in the job on the shop-floor that promote learning in teams in a leaned production system, and identify organizational barriers for such learning, so that all employees take part in process innovation. A routine task with low demand on cognition, standardized procedures and little autonomy raises few issues to be discussed. Our hypothesis (H1) is that the cognitive demand in the principal task shows no relation to team reflectivity. However, the team's other responsibilities and extra-role work tasks might be more cognitively challenging and give input to discussions and reflectivity (H2). Further, although the degrees of freedom are very limited in carrying out the principal task, the participation in decisions regarding standards and routines may stimulate team reflectivity (H3), as the team members later all need to work accordingly. A participative leadership style that involves the team in formulating goals will stimulate reflectivity (H4) as what to achieve is not obvious when it comes to process innovation. Inter-team relationships that involve learning from what others do, or getting feed-back on team performance might stimulate team reflectivity upon work practises that hinder efficiency (H5). In line with previous research hypothesis 6 (H6) postulates that team reflectivity impact on proactive behaviour in teams.

Method The results are based on data from an on-going longitudinal study within Volvo CE Production. The work tasks on the shop-floor were either machining of core details or assembly work of parts to axles or transmissions to wheel-lauders. The results are based on work task analysis (REBA instrument), a questionnaire to all shift teams (N=56 and response rate 84%), and interviews with shift teams, managers on different levels and support functions.

Results Preliminary results show that we receive substantial, but not full support for the research model. H1 was confirmed. The relationship between cognitive demand in extra-role activities and operational development, participation in decision making and leadership style and

team proactivity is partly mediated by team reflectivity. The main result is that the cognitive demand of extra-role activities impact on teams' proactivity through team learning processes although the time for such activities is less than 10% of the work time.
Discussion The hindrances for making use of the full potential of team learning are discussed as the characteristics of cross-functional relationships and interdependence between support functions and teams. The teams' involvement in setting standards, if standardization is regarded as a process owned by teams, or thought of as rules set by experts, and teams' involvement in problem-solving are important issues for team learning within lean production. Creating team' learning within lean puts demand on expertise in managing cross-functional cooperation.

THE ROAD FROM TRANSFORMATIONAL LEADERSHIP TO CREATIVE WORK BEHAVIOR

Pascale M. Le Blanc and Koen W. Crooymans (Eindhoven University of Technology, Human Performance Management Group)

Employees' creative ideas are the building blocks for organizational change and innovation. Thus, identifying the antecedents of employee creativity is important as it enables present-day organizations to survive, adapt and to gain competitive advantage. The current study focuses on leadership behavior in relation to employee creativity. The processes by which leaders encourage employees to become creatively involved in their work have yet to be fully understood. According to Amabile et al. (2004) the literature linking specific leader behaviors to group performance is scant, and the literature linking specific leader behaviors to individual creative performance is even smaller. Moreover, Carmeli & Schaubroeck (2007) noted that one of the key questions in creativity research relates to the motivation of individuals to become and remain creatively involved at work.
The current study aimed at uncovering the motivational process underlying the relationship between leaders' transformational leadership behaviors and employees' creative work behaviors. More specifically, we tested the hypothesis that this relationship is mediated by employees' level of work engagement. Evidence for a significant positive relationship between transformational leadership and employees' work engagement was already provided in a diary study by Tims et al. (2011). Based on Fredrickson's Broaden and Build theory (1998), we also propose a positive relationship between employees' work engagement level and their display of creative work behavior. In addition, we propose that both of the above relationships are moderated by employees' level of job autonomy.
Data were collected by means of self-report questionnaires that were filled out by 130 employees of a big public transport company in the Netherlands. The focal constructs of our research model were assessed by means of validated measures.

Results confirmed our main hypothesis, as the relationship between transformational leadership and creativity was fully mediated by work engagement. However, contrary to expectations, neither the relationship between transformational leadership and work engagement nor the relationship between work engagement and creative work behavior was moderated by job autonomy. Instead, we found that work engagement also fully mediated the relationship between job autonomy and creative work behavior. So, both transformational leadership and job autonomy contribute to employee work engagement, which in turn is significantly positively related to employee creative work behavior. In future research, the above relationships may be tested using a longitudinal design and/or more objective measures of creative work behavior.

HOW DO NEW PRODUCT DEVELOPMENT TEAMS BUFFER THEIR BOUNDARIES? THE ROLE OF HUMAN ENERGY, WORK-OVERLOAD, AND INNOVATION

Leicht-Deobald, U. Bruch, H. (University of Sy. Gallen)

Innovation is crucial for the survival of organizations. Oftentimes, organizations adopt teams to develop their innovative products (Hulsheger, Anderson, & Salgado, 2009). However, new product development (NPD) teams face manifold pressures: On the one hand, organizations push their NPD teams to develop novel products as quickly as possible. On the other, costumers place high environmental uncertainty on NPD teams deciding whether they buy these new products or not (Edmondson & Nembhard, 2009). Above and beyond, within the last decades, NPD teams increasingly have to work in debureaucratized and network-based organizational designs (Cross, Yan, & Louis, 2000) with an increased need to directly collaborate with their various stakeholders inside and outside the organization (Ancona & Caldwell, 1992). Prior research has seldom yet examined how NPD teams buffer their team boundaries against external environment uncertainty and outside disturbances (Marrone, 2010). However, this research, opposed to its predictions, has not found a direct link between team boundary buffering and innovative team performance (Faraj & Yan, 2009). Building on literature stemming from a conservation of resources (COR, Hobfoll, 1989) perspective and literature on human energy in organizations (Quinn, Spreitzer, & Lam, 2012), we examine whether we can explain the link between team boundary buffering and innovative team performance using productive team energy as a mediator. Productive team energy is the demonstration of positive affect, cognitive arousal, and agentic behavior among team members in their joint pursuit of organizationally salient objectives (Cole, Bruch, & Vogel, 2012).

Leicht-Deobald & Bruch: How do new product development team buffer their boundaries? Prior research on team boundary activities referred on a structural contingency argument to theorize about the fit between external internal team activities (Choi, 2002). Building on the COR framework, we turn this contingency argument from a structural to a psychological level and propose that team boundary buffering is only effective when it equilibriums external demands and internal resources. Concretely, we expect that only when teams' face serious work-overload team boundary buffering is an effective strategy to sustain the productive team energy and ultimately innovative performance. Otherwise, it hampers
external coordination (Drach-Zahavy & Somech, 2010) and allows social loafing within the team (Latane, Williams, & Harkins, 1979).
We tested our hypotheses, based on structural equation modeling, with a multisource dataset of 89 operational automotive NPD teams, comprising 724 employees and 89 team leaders. These analyses supported our moderated mediation model. Our study contributes to the literatures on team innovation, team boundary activities, and human energy in organizations. First, it contributes to the team innovation literature by showing a positive link between team boundary buffering and innovative team performance and explaining it within a COR framework. Second, it contributes to the literature on team boundary activities by introducing team work-overload as necessary conditions for the effectiveness of team boundary buffering. Last but not least, our study contributes to emerging field of human energy by extending the COR perspective to the level of teams.
Keywords: Team boundary buffering, productive team energy, team work-overload, innovation, moderated mediation.

UNDERGRADUATE'S INNOVATIVENESS MAIN DETERMINANTS: DO PREVIOUS INNOVATION BEHAVIORS MATTER?

Martín, P., & Fras, A. B. (University of Zaragoza)

Individual innovation at work has been widely claimed as a key factor for organizational survival and success. Innovative workers of tomorrow are the freshmen and university students of today. Freshmen and undergraduate are one of the major forces of the future innovations in organizational settings. Moreover, it is expected them to become innovators in order to achieve a successful work transition. In addition, transition into university and academic work could place on students important demands which in turn, would lead to a poor undergraduate's psychological well-being. Previous research on individual innovation has showed that in order to cope with demands, individuals can introduce new ways of doing things. In this context, the study of individual innovation at this level could improve our knowledge around the way in which innovation takes form. In this aim, this study investigates individual innovation among 79 university students of Psychology, Management, Fine Arts, and Teaching belonging to the same organization, the Faculty of Human and Social Sciences of Zaragoza University, trying to highlight main influences on undergraduate's innovativeness, from a longitudinal point of view. Our results show that previous

innovation behaviours as freshmen, present autonomy and cognitive demands are positive influences on individual innovation among university students, whereas it seems that perceived stress and innovation are negative related. Practical implications, in terms of fostering innovation efforts, are discussed.

WHY JOB INSECURITY HINDERS INNOVATIVE WORK BEHAVIOUR: A TEST OF THREAT RIGIDITY THEORY

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Introduction

Previous research has shown that job insecurity, the subjective perceived likelihood of involuntary job loss, has detrimental consequences (Cheng & Chan, 2008; Sverke, Hellgren, & Näswall, 2002). Hence, it may also act as a barrier for employees' introduction and application of ideas, processes, products or procedures, new to the relevant unit of adoption, coined as innovative work behaviour (IWB) (West & Farr,

1990). The process through which job insecurity negatively affects IWB can be specified using threat rigidity theory (Staw, Sandelands, & Dutton, 1981). According to this theory, a perceived threat, such as the threat of losing one's job, causes strain (1) which decreases information processing (2), leading to lower levels of IWB (3).
This study examines whether the perception of job insecurity, often instigated by dynamics of innovation at the organizational level, affects employees' innovative work behaviour (IWB) and how this relationship may be explained. More specifically, we investigate whether threat rigidity theory (TRT) explains this relationship by constructing and testing a two-mediation process. To cover the process described by TRT, we measured job insecurity, the subsequent strain, employees' information processing and their level of IWB. Concerning our two mediators, we use irritation to measure strain, while concentration and cognitive flexibility are indicators of information processing.

CONSEQUENCES OF CREATIVITY: THE GOOD, THE BAD, AND THE UGLY

David R. Peterson (Warwick Business School); Tamara Friedrich (University of Warwick/ Warwick Business School)

There are many assumed benefits of creativity for individuals, groups, and organizations (Sawyer, 2012). However, creativity refers to a multitude of cognitive, affective, and social processes. The complex, multidimensional nature of creativity broaches the question of what is it about creativity that is beneficial for individuals, groups, and organizations? In this paper we discuss the good and bad aspects of various cognitive, affective, and social processes underlying creativity in organizations and we examine the ugly possibility that the two cannot be fully separated. Drawing on existing research, we highlight ways organizations and managers can balance the positive and negative effects of specific creative processes. Finally, we also put forth a number of propositions aimed at stimulating research on the effective management of creative processes.

At the individual level various cognitive processes including the generation, combination and evaluation of ideas, as well as affective process such as motivation, influence creative performance. And these processes affect other outcomes. For example, individual creative exploration is held to promote health and well-being (Creek, 2005). However, the prolonged, arduous, and ambiguous nature of creative work in organizations suggests a number of potentially detrimental consequences for individuals engaged in such work, including high stress, burnout, and decreased self-efficacy (Maslach, Schaufeli, & Leiter, 2001).

If creative work is difficult and complex for individuals, it is even more so for groups. On the one hand, group members can alleviate the workload placed on other members through social processes such as group brainstorming and knowledge sharing (Salazar, Lant, Fiore, & Salas, 2012). On the other hand, the complexities inherent in working effectively with others while managing various external demands can cause serious breakdowns in performance (Hülsheger, Anderson, & Salgado, 2009; West, 2002). For example, the individual characteristics of those typically working on creative teams—autonomous, ambitious, self-confident—point to the difficulties of cooperating and leading in creative groups (Feist, 1998; Mumford & Gustafson, 1988).

Creativity at the organizational level includes resource allocation decisions, diversification, exploration, and exploitation. Creative projects must be evaluated and investment decisions made. However, the majority of new innovative projects fail (Cooper, 1988). This high failure rate is at least in part due to a lack of understanding of how to manage various creative processes during the very early stages of creative work (Khurana & Rosenthal, 1997; Reinertsen, 1999). Many other advantages and disadvantages of creativity in organizations are discussed.

The specific processes underlying creative performance have differing and interacting effects on various outcomes. Additionally, relatively little attention has been given to cross- and multi-level relationships between creativity and various outcomes (Rousseau, 1985). For example, diversity of ideas is often held to be beneficial at the group level, but introducing new and conflicting information may negatively impact an individual's creative thought (Friedrich & Mumford, 2009). We hope this paper will bring more attention to the effects of specific creative processes underlying creative work in organizations.

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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. Every morning the employee´s recovery and engagement levels were measured and every afternoon their rumination (problem-solving pondering, detachment, and affective rumination) and creativity levels were measured.

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.

A dialectic perspective on ambidextrous leadership for innovation

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Innovation, the generation and implementation of novel and useful ideas (Amabile, 1988; West & Farr, 1990), is a dynamic and complex process. One possibility to master the complexity of innovation process is by use of leadership (Mumford, Scott, Gaddis, & Strange, 2002). Although there has been quite a bit of research on leadership for innovation, the results have been rather inconclusive (Rosing, Frese, & Bausch, 2011). We argue that this is the case because past research on the relationship between leadership and innovation has neglected the dialectic nature of innovation (Bledow, Frese, Anderson, Erez, & Farr, 2009). The aim of this paper is to explore the concept of ambidextrous leadership that we recently established to explicitly embrace the dialectics of leading for innovation.

The concept of ambidextrous leadership is based on the assumption that innovation processes require individuals and teams to both explore new ideas for idea generation and exploit existing competences for idea realization (West, 2002). Following this idea, ambidextrous leadership combines two different types of leadership behaviors. First, opening leadership behaviors such as allowing for variance and supporting experimentation should promote exploration (Hypothesis 1). Second, closing leadership behaviors such as monitoring goal achievement and focusing on adherence to rules should foster exploitation (Hypothesis 2). Additionally, leaders need to flexibly switch between the two types of leadership behaviors as the requirements for exploration and exploitation change over time. We thus assume that leaders are only able to promote individual ambidexterity (i.e., the integration of exploration and exploitation), if they combine high levels of opening and closing leadership behaviors over time (Hypothesis 3).

To test our assumptions, we conducted a weekly diary study with a convenience sample of 60 individuals over six weeks with one questionnaire each week. On average, employees participated in 3.5 out of six weeks. In each questionnaire, we asked individuals about their explorative and exploitative behaviors as well as their direct supervisors' opening and closing leadership behaviors in the past week. Both followers' and supervisors' behaviors varied considerably over time, supporting our within-person approach. To account for the data nested within individuals, we used Hierarchical Linear Modeling (HLM) with variables centered at individual means.

Results largely confirmed our assumptions. Opening leadership was marginally positively related to followers' explorative behaviors (γ = .19, p = .06), whereas the relationship between closing leadership and followers' exploitative behaviors was positive, albeit non-significant (γ = .15, p =. 11). Finally and most importantly, ambidextrous leadership (the product of opening and closing leadership) was positively related to followers' individual ambidexterity (γ = .25, p < .05), while controlling for the main effects of opening and closing leadership.

Our findings add to the growing literature on the dialectics of the innovation process. The use of a within-person perspective provided us with insights regarding the dynamics of the relationship between leadership behaviors and individual ambidexterity over time. Although our results can only be preliminary because of the relatively small sample size, this study represents an advancement in the literature on leadership for innovation.

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HOW MOTIVATIONAL FACTORS IMPROVE CREATIVITY IN VIRTUAL COMMUNITIES

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Creativity is one of the most desired phenomena in organizations and at present, it is necessary to maintain creativity in order to keep up with the current competitive and global world in which companies operate. Research on creativity is vast and has been developing for decades, and with recent changes on information technologies, there is a new field to explore, from virtual teams to virtual communities and several forms of collaborations inside them.

Virtual communities have become a source of creativity in recent years, with the rise of social networks, forums, and webpages that have sprouted thanks to the creation of the Web 2.0 technologies. Collaboration through these channels can lead to ideas, products and strategies that are more creative (Schröder, & Hölzle, 2010). Therefore, virtual communities are gaining attention among scholars and practitioners alike due to their many advantages. Having access to geographically distributed knowledge and expertise allows creativity to unfold overcoming time and organizational boundaries, enabling organization and end-user to interact, and collecting the opinion of people from different cultures, expertise and interests to develop into creative new ideas. Hence, the use of virtual communities is spreading worldwide, the majority of Fortune 500 companies use virtual communities for several purposes (Abuhamdieh, 2006; Chiu, 2006) and many educational institutions feature different forms of virtual communities.

However, this kind of communities pose several challenges for collaborators and managers to maintain participation creative, and require great efforts in design and implementations to achieve the goal of the community. Motivational factors are associated to higher creativity, for example, social identification and trust are facilitators for creativity on virtual communities (Askay & Spivack, 2010). Also knowledge sharing, the main form of collaboration in virtual communities, affects creativity positively and therefore it is interesting to keep members of the community sharing what they know to facilitate creativity (Zakaria, Amelinckx, and Wilemon, 2004).

The objective of the present paper is to study how motivational factors influence on creativity in virtual communities.
Data were collected from two learning oriented virtual communities (N=54) that worked during three months. They have to develop a prevention campaign to use of new technologies. Creativity was measured using Consensual Assessment Technique (CAT). In order to test the hypothesis hierarchic regression analyses are performed, and a descriptive qualitative analysis of the interaction on both communities is detailed in order to provide information about how creative work occurs in this type of communities.

Results show that motivational factors are positively related to creativity. Moreover, we find different phases in the development of creativity process in these learning oriented communities.

This study offers evidence about the importance of motivational factors and knowledge sharing in creativity on virtual communities.
KEYWORDS: Creativity, virtual communities, online communities, social identification, motivational factors, trust, knowledge sharing.

The influence of team mental models on team effectiveness: The mediating role of intragroup conflict and creativity

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A large number of empirical studies demonstrates the benefits of team mental models for team processes and outcomes, such as performance, adaptation, and satisfaction (e.g., Mathieu et al., 2000; Resick et al., 2010). However, little is known about the relationship between mental models, creativity, and effectiveness. On the one hand, it has been argued that mental models may stiffen creativity (Skilton & Dooley, 2010). When team members have too much overlap in their understanding about task and team aspects of work, this may reduce their ability to innovate and be creative. On the other hand, previous studies suggest a positive effect of mental models on performance as mental models foster effective team processes (Marks et al., 2002; Mathieu et al., 2000). Recent theoretical models have shown that teams whose members share mental models are more able to adapt their performance when they are confronting unexpected events (Burke et al., 2006; Rosen et al., 2011). If team
members have a similar understanding about the resources they need to accomplish the tasks and about each other's responsibilities, team members may have the opportunity to develop new ideas (Cannon-Bowers et al., 1993). An additional factor that is likely to play a role in the relationship between mental models and creativity is intragroup conflict. Creativity may be threatened when teams experience high levels of intragroup conflict, which in turn inhibit team effectiveness. This happens, because intragroup conflict may impede team members' ability to share
information, develop ideas, and in turn decrease team effectiveness (De Dreu & Weingart, 2003; de Wit et al., 2012). Although researchers have analyzed the influence of mental models on functional processes, such as coordination and communication, little is known about their effect on dysfunctional processes, such as intragroup conflict. Therefore, in the present research we empirically analyze the mediating mechanisms of intragroup conflict and creativity between mental models and team effectiveness (performance, adaptation, and satisfaction). We analyze four types of intragroup conflict: task, relationship, process, and temporal. The study was conducted in a management simulation involving 165 teams (752 individuals). We collected data at three time moments. We used a path analysis approach that allowed us to test our full conceptual model.
Results show that mental models are positively correlated with creativity ($r = .52$, $p < .01$), and that intragroup conflict is negatively correlated with creativity ($r_{task} = -.32$, $p < .01$; $r_{process} = -.41$, $p < .01$; $r_{relationship} = -.47$, $p < .01$; $r_{temporal} = -.47$, $p < .01$). Our results show, for instance, that mental models have a positive indirect effect through relationship conflict and creativity on performance (.08 [CI = 0.01, 0.21]), adaptation (.03, [CI = 0.01, 0.08]), and satisfaction (.02, [CI = 0.01, 0.06]). Our study opens an avenue on mental models research showing that even when team members share knowledge about team and task aspects of work they are able to be creative which improves team effectiveness. Our findings also suggest that intragroup conflict has dysfunctional effects on creativity.

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Theory

Within organizations the creation and implementation of innovative ideas lies in the hands of work teams, making them central for overall innovation (Elkins & Keller, 2003; Hülsheger, Anderson, & Salgado, 2009). A team-related variable that has been found to be positively related to innovation is team member exchange (TMX) (Agrifoglio & Metallo, 2010; Eisenberger, Fasolo, & Davis-LaMastro, 1990; Scott & Bruce, 1994), i.e. team members' perceptions of the quality of relationships within their team (Seers, 1989). However, research investigating the mechanism underlying the effects of TMX on innovation is scarce (Cole, Schaninger, & Harris, 2002). In this study, we propose perceived team efficacy as a mediator. Good social relations within the team (high TMX) increase the availability of social resources like positive affect (Liden, Sparrowe, & Wayne, 1997) and the sharing of knowledge regarding strategies for task achievement (Liao, Liu, & Loi, 2010). These, in turn, support the development of efficacious beliefs, which facilitate team innovation. However, not only effective cooperation within the team but also between teams and their environment has been regarded as crucial for innovation because organizations create teams based on specialization who need to interact with their environment to perform their tasks effectively (Smith, Carroll, & Ashford, 1995; Sundstrom, De Meuse, & Futrell, 1990). Therefore, we additionally focus on team boundary spanning, i.e. relevant activities team members display towards their environment (Ancona & Caldwell, 1990). Since TMX is likely to also affect how team members view their work environment and act towards it (Klein, Conn, Smith, & Sorra, 2001; Salancik & Pfeffer, 1978), we integrate team members' boundary spanning behaviors as a second mediator in our model of TMX and innovation.

Method We conducted a field study at a major German research institution. Research teams were surveyed with an online questionnaire leading to a sample of 28 teams with 170 members. Teams had 11 researchers on average, whose mean age was 30 and 79% were male.

Results

Analyses were conducted with HLM7 due to the nested data structure. As predicted, we found a significant positive relation between TMX and innovation. Furthermore, we found team efficacy as well as team boundary spanning to partially mediate this relation.

Limitations

The relatively small sample size restricts the generalizability of the results. The validity of the results for other contexts than academia remains to be tested.

Implications

These results show how collaboration within the team is related to collaboration at team boundaries, thus possibly having effects on the whole organization. Selecting compatible team members and fostering intra-team collaboration is a prerequisite for successful innovation.

Value

To our knowledge, this is the first study to connect social exchange relationships between team members with their behavior towards the team environment. It supports the relation between TMX and innovation in a research context and answers calls for empirical evidence on the antecedents of boundary spanning behaviors (Ancona & Caldwell, 1990; Edmondson, 1999), revealing that both processes within and at the team boundary are relevant for innovation.

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Voice Initiative and Employee's Perceived Health – The Mediating Role of Emotions at Work

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In this study we analyzed the effects of employees having initiative behaviors - like voice - on employees' perceived health. Our contribution to the literature is threshold. First, this research has focused on voice's consequences, which contrasts with the majority of the existing literature that typically has focused on voice's predictors. Moreover, we contribute to the literature by studying the impact of voice specifically on employee's well-being, an understudied outcome in what regards initiative behaviors. Finally, we investigated this effect on a blue-collar workers' sample, which is not common. Drawing on Conservation of Resources Theory (Hobfoll, 1989), we tested two competing hypothesis regarding how voice behaviors are related to well-being: a resource conservation hypothesis and a resource acquisition hypothesis. According to the resource conservation hypothesis, voice behaviors would be negatively related to employees' well-being, since voice is an initiative behavior that is risky for the employee, involves effort and consumes time and energy, which will drain some of the employee's resources (Ng & Feldman, 2012). Conversely, the resource acquisition hypothesis posits that voice can be instrumental, not only, in obtaining additional resources that help people deal with work stressors, but also in achieving personal goals and needs (Ng & Feldman, 2012). To test these hypotheses we developed a study using multisource data (employees and **supervisors**). Results from 171 employee-supervisor dyads revealed that employee's voice behavior reported by the supervisor is positively related to employee's perceived health. Moreover, results suggested that this relationship is explained by job related affect associated with the enactment of those initiative behaviors. Namely, positive-emotions and tension-emotions felt at work. We found that the emotions people experience at work mediate the impact of voice behaviors on employee's perceive health. In fact, employee's voice initiatives are related to more positive emotions and less tension emotions experienced at work. In turn, higher positive emotions and lower tension emotions felt at work are associated with employee's perception of a better health. Thus, we can say that our data provided more support for the resource acquisition hypothesis, according to which voice behaviors are positively related to employee's well-being. We discussed implications for future research as well as for managerial practice.

Keywords: voice, emotions at work, health, Conservation of Resources Theory

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, education and nationality.

Methodology

A survey was conducted on 237 university students (79 French, 80 Italian, 79 Spanish), enrolled in Science and in Liberal Arts faculties; 125 employees were also 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

Social representation of innovation in France, Italy and Spain is mainly related to the idea of Something New, Creative and Technology Related, which brings Good Results for the organization adopting it. This representation is accompanied by two emotional components: a positive, useful related, one, and worry for the perception of difficulties related to complexity and slowness. Innovating is facilitated by time and resources, investment in R&D activities and motivation, while it is believed to be hindered by difficulties in financing and in reorganizing productive processes. This representation is basically shared among students of the examined Countries, with limited effects of the type of faculty.

Main limitations concerns the fact that Spain and Italy are countries with same level of innovativeness; it is an exploratory and descriptive 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.

Keywords: innovation, social representation theory, beliefs, exploratory study, cross-cultural study