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### Does the context matter?

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**DOES THE CONTEXT MATTER?**  
**THE INTERPLAY OF HR SYSTEMS AND RELATIONAL CLIMATES**  
**PREDICTING INDIVIDUAL AND TEAM CREATIVITY**

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## **Does the context matter? The interplay of HR systems and relational climates predicting individual and team creativity**

### **Abstract**

Given the influential role of organizational context for creativity, this study examines the cross-level effects of two prevalent contextual elements – HR systems and relational climates – on individual and team creativity. We have conducted a multi-level multi-source study through hierarchical linear modeling on a sample of 282 employees nested in 69 teams and 38 firms. The results show that the interplay hypotheses regarding potentially creativity-facilitating contexts were not supported. However, findings suggest that relational climates represent more effective positive predictors of creativity at both levels, above and beyond the effects of HR systems. Therefore, given their very prominent role in enacting the HR context and co-creating the climate in place, line managers should strive to consider individual and team creativity in relational settings and promote an appropriate work context categorized by relational climates. Treating creativity at two different levels (individual and team), and accounting for a cross-level interplay focused on the context of those important performance outcomes, have important theoretical implications for creativity and HRM research.

**Keywords:** Creativity, organizational context, HR systems, relational climates, multi-level analysis

## Introduction

*“Only by using multiple lenses simultaneously, looking across levels, and thinking about creativity systematically, will we be able to unlock and use its secrets” (Hennessey & Amabile, 2010, p. 590)*

The heavy focus on capitalizing on creativity in recent years is not surprising, as it represents the mere starting point for innovation in contemporary organizations to face the ever-increasing business demands (Škerlavaj, Černe, Dysvik, & Carlsen, 2016). Both individual and team creativity have proven their practical significance for organizations' innovativeness, adaptability and competitive advantage (Barney, 1991; Zhou & Hoever, 2014). Scholars, therefore, have directed their interests towards exploring and investigating the factors that have either nurturing or impeding influences on creativity (Perry-Smith & Shalley, 2003). Research findings have disclosed that individual and team creativity are subject to a series of contextual factors across multiple levels within organizations (for reviews see Shalley, Zhou, & Oldham, 2004; Zhou & Hoever, 2014; Zhou, Wang, Bavato, Tasselli, & Wu, 2019). Johns (2006) presents organizational context as "situational opportunities and constraints that affect the occurrence and meaning of organizational behavior as well as functional relationships between variables" (p. 386), which can be seen most often as “top-down” or cross-level moderators (Mowday & Sutton, 1993).

Integrating multiple factors allows for a systematic investigation of interplay effects that capture a more comprehensive description of what drives creativity and how it is affected at individual and team levels within companies (Hennessey & Amabile, 2010; Kozlowski & Klein, 2000). We argue that such contextual factors of creativity are based on both ed organizational efforts and those that emerge (Batistič, Černe, Kaše, & Zupic, 2016; Kaše & Zupan, 2007). A considerable evidence suggests that deliberately designed Human Resource (HR) systems, particularly commitment-based or high-performance work systems, impose one of the most influencing (top-down) contextual factors on individuals' and teams' attitudes and behaviors. One of such salient individual behaviors is creativity, and research linking higher-level contextual factors such as the HR systems to it is scarce (Černe et al., 2017; Liu, Gong, Zhou, & Huang, 2017). This is especially problematic as the multi-level theory lens has recently also emerged in the HR literature (Peccei & Van De Voorde, 2019). Calls have been made to further explore how HR systems can be related to individual behaviors, which is one of the core messages of HR (Boon, Den Hartog, & Lepak, 2019; Jackson, Schuler, & Rivero, 1989). The enactors of such HR systems are in most cases line managers (Perry & Kulik,

2008). Exploring how their perception of “implemented” HR systems relates to individual outcomes or behaviors “can help build knowledge on the line manager perception of HR, driving concept refinement and theory building at each level as well as enhancing understanding of the effects across levels” (Boon et al., 2019, p. 2527).

Furthermore, creativity is, in essence, a social process and has a relational nature (Perry-Smith, 2006) – it is driven by a collective exchange process of idea preparation, incubation, illumination and verification that is embedded within social relationships in groups (Haragdon & Bechky, 2006; Mueller & Cronin, 2009; Parjanen & Hyppiä, 2019). We propose that spontaneously emerging relational climates (Fiske, 1992), shaped especially by line managers, are crucial (James & Jones, 1974; Schneider, Ehrhart, & Macey, 2013) for creativity manifestation. Line managers’ behaviors are likely to be a key feature, interpreted as representative of context-specific organizational processes by individuals within a team (Kozlowski & Doherty, 1989). Furthermore, line managers are also the catalyst of events and processes occurring at higher levels, being as they are the most salient, tangible representative of management policies (Kozlowski & Doherty, 1989; Perry & Kulik, 2008; Schneider et al., 2013). Thus, focusing on line manager perceptions of a relational climate in place – which describes employees’ relationships as either communal and predicated on solidarity and unity, or transactional and based on immediate returns – can shed light on how contextual factors perceived by line managers might lead to either individual or team creativity (Batistič et al., 2016; Černe, Batistič, & Kenda, 2018; Wang, Rode, Shi, Luo, & Chen, 2013).

Recently, some authors have integrated a context approach (Johns, 2006, 2017) with a multi-level perspective (Kozlowski & Klein, 2000) and examined the interplay effects of the contextual conditions – HR systems and relational climates – on different outcomes, such as proactive behavior (see Batistič, Černe, Kaše, & Zupic, 2016). The logic behind their argumentation builds around combining deliberately designed HR systems (Lepak & Snell, 1999, 2002) with emergent relational climates (Fiske, 1992). This could maximize their impact on certain attitudes and behaviors because of the synergistic effects of looking at both simultaneously, which might exceed the influence of each contextual factor in isolation (Johns, 2006). Following the same reasoning, adding relational climates (the social perspective) to the equation could have a surplus effect compared to looking only at synergies among HR practices forming an HR system (Jiang et al., 2012). However, to our knowledge, the interplay effects between HR systems and relational climates have received scant attention in the creativity literature. Hence, we aim to examine the interplay between two divergent HR

archetypes – commitment and compliance (Lepak & Snell, 2002) – and two corresponding types of relational climates that were highlighted by prior research (cf., employee proactivity Batistič et al., 2016) – communal-sharing and market-pricing climates – in predicting creativity at individual and team levels. Both contextual variables are theorized to interact with relationship at work (Lengnick-Hall & Lengnick-Hall, 2003; Mossholder et al., 2011), thus clearly complementing the social process and a relational nature of creativity (Perry-Smith, 2006).

Taken together, the paper intends to contribute to the relevant literature in two distinct manners. First, investigating the interplay between the two selected contextual factors should offer an integrated understanding of the organizational context role in predicting individual and team creativity (Shalley & Gilson, 2004; Zhou & Hoever, 2014). This approach addresses the synergies required for fostering the social process of creativity, both at the individual and team level, highlighting the duality between the two and testing whether a particular interplay of contextual factors fosters creativity at both studied levels differently or not. Adopting a multi-level perspective comes as a response to calls to support the growing multi-level research trend in many research disciplines, including HRM (Den Hartog, Boon, Verburg, & Croon, 2013; Heffernan & Dundon, 2016; Paauwe, 2009) and creativity (Drazin, Glynn, & Kazanjian, 1999; Zhou & Shalley, 2008; Zhou & Su, 2010). By examining the cross-level interplay among HR configurations and relational climates, our study has the potential to enhance our understanding of how the HR context as perceived by the supervisors, who play a crucial role in the enactment of HR systems and consequent HR practices (Boon et al., 2019), can bring about the value of relationships crucially needed for creative work. Exploring both contexts might be extremely warranted as the social nature of both theoretically matches the relational nature of creativity, thus providing further understanding of how creativity might be enhanced.

Second, examining the interaction between two different extremes of HR systems and matching relational climates allows for a comparison between positive and negative contexts. Such an approach touches on the discussion about emerging *versus* designed contexts in organizations (Andersen & Nielsen, 2009; Mintzberg & Waters, 1985) by seeing top-down designed HR systems in interplay with the emergent relational climates, and investigates their cross-level interplay in explaining creativity. Theoretical work of Černe, Batistič, and Kenda (2018) conceptualized a model of cross-level interactions among HR systems and leadership in predicting creativity and innovation. Our research model extends this stream of inquiry and

strategic HRM research in general by examining multiple HR configurations combined with relational climates in facilitating a context conducive (or not) for individual and team creativity, and thus offers a better and more thorough explanation of these phenomena at work (Su, Wright, & Ulrich, 2015). The practical implications of this study should help managers in framing and designing the ideal workplace settings to enable breakthrough idea generation at multiple levels within their firms and channel it into real products.

### **Theoretical background and hypotheses**

#### ***The context of creativity at the individual and team level***

Most of the existing research has primarily measured workplace creativity at the individual level as the initial point of idea generation (Kurtzberg & Amabile, 2001; Mueller & Cronin, 2009; Paulus & Nijstad, 2003). Due to the frequent adoption of teams in contemporary organizations, researchers have begun to dedicate more effort to studying creativity at the team level (George, 2008; Tsai, Chi, Grandey, & Fung, 2012; Zhou & Hoever, 2014). Although there is no “consensual definition” of either individual or team creativity, all the existing conceptualizations share the same view that creativity is about generating and producing novel and feasible ideas, solutions, or business strategies (Amabile, 1988; Woodman, Sawyer, & Griffin, 1993; Zhou & Shalley, 2003). The same notion applies to both types of creativity, with the only difference that ideas at the team level are generated by individuals working in the same team (Shalley et al., 2004; Shin & Zhou, 2007).

In literature on creative behavior in teams, there are two perspectives that address whether individual and team creativity are isomorphic, that is, defined in the same way at both levels, and influenced by the same factors, or not. Individual-level creative behavior is a precondition for team creativity (Drazin et al., 1999); however, how this occurs can follow two patterns depending on one’s perspective. The first perspective assumes that team creativity emerges as an aggregate of creative behaviors exhibited more or less evenly by all members (Pirola-Merlo & Mann, 2004). In this case, individual team members exhibit creative behaviors, which in turn, create expectations of creative performance for other members and influence them to adopt similar behaviors (Gong, Kim, Lee, & Zhu, 2013). Through a recursive social influence process, shared norms and expectations for exhibiting creative behavior emerge among team members and elevate team-level creativity (Gong et al., 2013). Such developments denote an isomorphic perspective of creativity at different levels,

which is consistent with the classic approach underlying previous work by Taggar (2002) and Pirola-Merlo & Mann (2004).

The second perspective highlights a more emphatic duality between creativity at the individual and team levels. Woodman et al. (1993) emphasized that team creativity is more than the aggregate creativity of individuals in a team; it rather comes as an outcome of team members' inputs, characteristics, communication and interaction, and context-factor effects. This logic rests on the reasoning that team creativity may not be completely determined by how individual creativity evenly co-creates team creativity, as it is the result of social influences stemming from interactive creative acts of individuals in teams (Drazin et al., 1999). Following this logic, individual creative contributions are integrated or combined, and configurations of team members' creative behaviors and interactions among them can be determined by team members' characteristics and their positions within a team.

Literature has shown that individual and team creativity can be influenced either positively or negatively by different organizational context conditions. On the one hand, there are positive supportive contexts, which might be created by HR systems that encourage participation and empowerment in decision making, allow more autonomy, offer development and training programs, fair compensation and incentives, developmental feedback and appraisals, in a social interpersonal climate of trust, equivalence, and communal relationships (Bowen & Ostroff, 2004; Chang, Jia, Takeuchi, & Cai, 2014; Ma, Long, Zhang, Zhang, & Lam, 2017). These positive context conditions have the potential to affect individual and team creativity through stimulating perceptions of autonomy and discretion, which induces team members' intrinsic motivation to reciprocate with creativity as a desired behavior in organizations (Černe et al., 2018). On the other hand, although negative or unfavorable contexts have long been viewed to impede creativity, several studies have shown that negative context features can positively influence individual and team creativity (Choi, Anderson, & Veillette, 2009; Ohly, Sonnentag, & Pluntke, 2006). As such, teams and individuals may resort to creativity to buffer the negative effects of such context settings.

There is a growing body of literature suggesting that both climates and HR systems are inherently linked to the line manager (Grojean, Resick, Dickson, & Smith, 2004; Schneider et al., 2013). We specifically focus on the line manager perception of both HR systems and relational climates for two key reasons. First, it is suggested that the line manager has a crucial role in establishing a climate, through various mechanisms such as value-based management and example setting (James & Jones, 1974). Thus, focusing on the line



manager's perception of relational climates makes sense theoretically (Peccei & Van De Voorde, 2019) as the line manager might be the main co-creator of such climates. Second, the devolution and multi-level perspectives within HR research have highlighted the important role of the line manager in implementing HR practices (Perry & Kulik, 2008). Line managers are in most cases seen as the key individuals for the implementation of various HR practices and systems, and exploring their perceptions can lead to new theoretical insights – for instance, around cross-level effects on individuals' behaviors (Boon et al., 2019; Peccei & Van De Voorde, 2019).

***A multi-level model of HR systems and relational climates predicting individual and team creativity***

In developing our model (see *Figure 1*), we derived insights from the multi-level perspective (Kozlowski & Klein, 2000) and the organizational context approach (Johns, 2006, 2017). HR systems are identified as bundles of policies and practices (e.g., training, rewarding) that are purposefully designed and put in place for shaping and influencing employees' attitudes and behaviors at lower levels (team, individual) through top-down effects (Becker & Huselid, 1998; Jackson et al., 1989; Jiang, Takeuchi, & Lepak, 2013; Tsui, Pearce, Porter, & Tripoli, 1997). These design practices and HR systems represent the outcome of the development of an HR strategy cascading from the business strategy, and decision-makers believe they will effectively elicit the desired employees' responses necessary for organizational success (Nishii & Wright, 2008). For example, extrinsic rewards, as an HR practice might provide a context where individuals with adaptive cognitive styles working on simple jobs can become more creative (Baer, Oldham & Cummings, 2003).

In the strategic HRM literature, four different HR configurations have been suggested; commitment, productivity, collaborative, and compliance (Lepak & Snell, 1999, 2002). HR systems are presented by two diametrically different archetypes; commitment-based and compliance-based (Arthur, 1992, 1994; Walton, 1985; Wood & De Menezes, 1998). Focusing on these extremes is theoretically important as it has been argued that both these systems are internalized to the organization, whereas the individuals in the other two can be outsourced (Lepak & Snell, 1999). Exploring the two extremes leads to a clear recognition of central constructs, relationships and logic of the focal phenomenon (Eisenhardt & Graebner, 2007).

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Insert Figure 1 about here

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Relational interpersonal climates represent the second influential context elements in the model. They emerge spontaneously in a bottom-up process from individuals' shared perceptions and interpretations about practices, policies, and behaviors (Fiske, 1992; Magni, Palmi, & Salvemini, 2018; Mossholder, Richardson, & Settoon, 2011). Fiske (1992) stipulated four types of interpersonal climates based on the relational model theory; communal sharing; authority ranking, equality matching, and market pricing (Boer & Berends, 2003; Boer, Berends, & van Baalen, 2011; Boer, van Baalen, & Kumar, 2004). Generally, these relational climates serve as a fundamental schema for individuals' relationships through guiding and coordinating their interactions with others in the workplace (Fiske & Haslam, 2005; Haslam, 2004). To allow for comparison, two relational climates were chosen in the present study – communal sharing and market pricing – that correspond to the two HR systems selected, to obtain a thorough understanding of organizational context effects (Batistič et al., 2016; Mossholder et al., 2011). In our case, we suppose that matching a positive/negative HR system with a positive/negative climate will provide positive synergistic effects. Having a positive synergistic complementary fit allows delivering a strong and consistent message to the employees, and thereby increases the likelihood that individuals make accurate attributions about what key behaviors they are expected to exhibit (Bowen & Ostroff, 2004). This will not be the case if there is a mismatch between the climate and systems, as such a situation could lead to an ambiguous message delivered to individuals resulting in negative behaviours and attitudes (cf., Cable & Edwards, 2004).

***The supporting context: The interplay between commitment-based HR systems and communal-sharing relational climates in predicting individual and team creativity***

It has been argued that a positive organizational context for creativity should emphasize individuals' well-being, which induces intrinsic motivation and enhances individuals' and teams' commitment to their organizations and develops long-term trusting relationships (Oldham & Cummings, 1996; Shalley et al., 2004). In this vein, we posit that a strong commitment-based HR system along with a strong communal-sharing relational climate would create a positive organizational context that provokes individual and team creativity. Studies have discussed that commitment-based HR systems speak for themselves in emphasizing employees' well-being through “coherent practices that enhance the skills of the workforce, participation in decision making, and motivation to put forth discretionary effort” (Sun, Aryee, & Law, 2007: 558). Authors argue that those practices are presumed to

stimulate individuals' intrinsic motivation, skills, and provide them with opportunities to show creativity (Chang et al., 2014; Chiang, Hsu, & Shih, 2014; Ma et al., 2017).

A strong communal-sharing climate introduces the second element in the proposed positive context. Under this climate, individuals' relationships are communal, strong, affective, emotional, predicated on solidarity and a sense of unity and belonging, where self-interests are blurred and differences are discarded (Fiske, 1992). That is, organizational members will experience equivalence, cohesiveness, harmony, and belonging to a particular community in which they feel responsible to collaborate and help each other (Clark & Aragón, 2013; Clark & Mills, 1993), which is likely to enhance team and individual creativity (Shin, Kim, Lee, & Bian, 2012).

Since both a commitment HR system and a communal-sharing climate are described as relational factors (Fiske, 1992; Fiske & Haslam, 2005; Lepak & Snell, 2002), we put forward that, if configured together, their interplay will positively influence creativity at team and individual levels through synergistic effects. For example, commitment HR systems concentrate on selective staffing (Lepak & Snell, 2002), which targets cognitive processes and divergent thinking through hiring team members with diverse backgrounds, expertise, and knowledge. They also offer creativity-oriented training and development programs (e.g., problem-solving, divergent thinking), which should encourage individual creativity through presenting guidance and educational opportunities that develop their creative skills and competencies. Thus, team members learn new ways to generate unusual ideas, which positively influences both the quantity and quality of generated ideas that might end up as creative solutions (Baruah & Paulus, 2008; Basadur, Wakabayashi, & Graen, 1990; Feldhusen & Goh, 1995). This process could be enhanced and complemented by individuals' inclination to exchange functional support and knowledge with other colleagues, which is common in a communal-sharing climate (Fiske & Haslam, 2005).

Further, rewarding the best novel ideas and offering group-based incentives may prompt team members' motivation to look for new knowledge and exchange information. Thus they resort to communicating, collaborating, and exerting more effort to come up with creative solutions (Chuang, Jackson, & Jiang, 2016; Eisenberger & Aselage, 2009; Eisenberger & Rhoades, 2001; Lopez-Cabrales, Pérez-Luño, & Cabrera, 2009). Also, designing high-motivational job characteristics for individual and team-based job designs characterized by high interdependency, autonomy, and task significance (Hackman, Pearce, & Wolfe, 1978) would raise interaction and communication levels and facilitate open knowledge

exchange (Collins & Smith, 2006). As communication and interaction are very frequent in a communal-sharing atmosphere, this would strengthen collaboration among team members which, in turn, contributes to idea cross-fertilization, thus maximizing team and individual creativity (Binyamin & Carmeli, 2017; Chang et al., 2014; Leenders, Van Engelen, & Kratzer, 2003; Ma et al., 2017).

What is more, providing appropriate performance appraisals (Shalley & Gilson, 2004) as well as developmental feedback and helpful informational guidance is likely to trigger individuals' and teams' intrinsic motivation (Deci & Ryan, 1985), which is fundamental for creativity (Zhou, 1998, 2003). Due to the feelings of trust and safety that prevail in a communal-sharing climate, team members and individuals have trust-based interpersonal relationships with their supervisors and colleagues (Fiske & Haslam, 2005), which would further stimulate individuals' internal motivation to generate ideas and then transfer them into creative solutions (Hülsheger, Anderson, & Salgado, 2009; Tierney, Farmer, & Graen, 1999).

Therefore, a strong communal-sharing climate would complement the positive effects of a strong commitment-based HR system and boost individual creativity, helping teams overcome obstacles that undermine their creativity (Gong, Kim, Lee, & Zhu, 2013; Mueller & Cronin, 2009; Perry-Smith, 2006). Additionally, Shin et al. (2012) argued that knowledge exchange at the team level will also boost individual creativity, as teams represent platforms by which individuals are prone to social connections that expose them to various viewpoints that could advance their creativity (Boer & Berends, 2003; Jones & George, 1998). We, therefore, deduce that the joint presence of a strong commitment-based HR system and a strong communal-sharing climate in an organization would create an ideal supporting context to reinforce breakthrough thinking at both team and individual levels. That is, both contextual elements are likely to mutually reinforce each other to provide most of the creativity prerequisites, such as intrinsic motivation, trust, and knowledge sharing. Therefore:

*Hypothesis 1. Individual (a) and team (b) creativity is higher where the interplay exists between a strong commitment-based HR system and a strong communal-sharing relational climate.*

***The unfavorable context: The interplay between compliance-based HR systems and market-pricing relational climates in predicting individual and team creativity***

The second aspect of our model presents a generally unfavorable, but potentially creativity-stimulating organizational context as the situation in which a weak compliance-

based HR system is combined with a strong market-pricing relational climate. Compliance-based HR systems, or “cost reducers” generally, represent HR systems in which individuals are externally motivated and subject to extensive monitoring and controlling to ensure their compliance to organizational rules and protocols (Boxall & Macky, 2009). Those systems typically set explicit and clear expectations of performance. Also, they offer temporary leasing contracts with fixed and narrowly defined job designs, job-based compensation, and supervisory feedback. Limited investment in training and development programs can be observed because employees’ competencies and skills are readily accessible in the labor market, thus reducing costs related to developing individuals internally (Arthur, 1992; Lepak & Snell, 1999).

A weak compliance-based HR system can be described as an HR system that has minimal practices for managing individual (limited to administrative and legally required HR activities and practices) and minimal rules for compliance, yet still emphasizes the highly transactional and short-term orientation of the system (Batistič et al., 2016). It can be argued that this particular situation might provide individuals with enough freedom and loosely applied rules (e.g., a minimum level of monitoring) for them to be creative.

A strong market-pricing relational climate reflects an organizational context in which individuals and teams have short-term and limited relationships that follow a “quid pro quo” principle (Thompson & DeHarpport, 1998). Put differently, employees’ cooperation is driven by proportionality and exchange norms, and what an employee gives to others is evaluated in comparable (qualitative or quantitative) values, ratios, and proportions (Boer et al., 2011; Clark & Mills, 1993; Jones & George, 1998; Van Baalen, 2013). In such a climate, individuals tend to collaborate and share knowledge only if they get something in return (e.g., self-concern, rewards, promotion) (Boer & Berends, 2003; Somech & Drach-Zahavy, 2013). For example, individuals would tend to act creatively or proactively if they receive comparable compensation and rewards or personal outcomes (Clark & Aragón, 2013; Batistič et al., 2016).

As both compliance HR system and market-pricing are transactional by their very nature (Fiske, 1992; Lepak & Snell, 1999, 2002), they are likely to interact and complement each other in predicting individual and team creativity. To illustrate, we argue that a weak compliance-based HR system and strong market-pricing climate could enhance creativity at multiple levels, because employees experience little pressure from supervisors, which enhances their feelings of autonomy over their work and allows them to seek novel ideas and

useful solutions to achieve their tasks, which might in turn increase their creativity (Zhou, 2003). Also, such a combination could potentially transfer signals to individuals and teams communicating that interactions between individuals and collaboration are encouraged and competition among them is welcomed.

Furthermore, Ohly and colleagues (2006) confirmed that routinized tasks can positively trigger individual creativity. They claimed that routinization saves time and employees' cognitive resources needed to accomplish tasks. Consequently, employees exposed to weak compliance HR systems and market-pricing conditions can redirect time and cognitive processes towards collaboration and competition with others, to exchange the knowledge necessary for enhancing their creativity and achieve their personal goals and self-interests. In such a situation, individuals and teams might be expected to be creative by the transactional bonds emerging from a market-pricing climate, while being supported to do so by a generally weak compliance HR system. Thus:

*Hypothesis 2. Individual (a) and team (b) creativity is higher where the interplay exists between a weak compliance-based HR system and a strong market-pricing relational climate.*

## **Methods**

### ***Sample and data collection***

Data were collected in December 2017 and January 2018 through online surveys on the SurveyMonkey platform, for a final sample of 282 blue and white-collar employees nested into 69 teams with their supervisors, from 38 different European (Dutch) organizations. The overall response rate was 68.8 %. The sample included a variety of companies doing business in various fields, such as electronic manufacturing, food and beverage production, and banking. The sample of employees was approached by the researchers and teams were included only if previous consent by all team members had been given. It should be noted that all the organizations participating in the survey needed to have at least 50 employees. Following arguments from previous studies (Batistič et al., 2016) and conforming with the European Commission definition ("What is an SME?," 2017) of small enterprises we assumed that a company with 50 employees would have established some sort of HR system (Storey, Saridakis, Sen-Gupta, Edwards, & Blackburn, 2010). The assumption was that in such case the organization would have a formal HR system in place.

The average number of employees per workgroup was 5 and the number of employees per workgroup ranged from 2 to 17. Approximately 63 percent of the employees were male and the employees were on average 37 years old (s.d. = 11.5). The average job tenure was 7.89 years (s.d. = 9.08).

A translation-back procedure (Brislin, 1986) was used to translate the scales from the original language (English) to the local language (Dutch) for data collection in organizations where English was not the operating language. The scales were translated by a person fluent in both languages and back-translated by another independent expert in the field fluent in both languages. Inconsistencies were then reviewed by both translators and two members of the authorship team, and reconciled to produce final measurement items in the local language. To alleviate potential issues related to common method variance we collected data using two separate questionnaires: one for the employees and one for their supervisors, who assessed the HR systems, relational climates, and team creativity. Podsakoff et al. (2003) state that such a procedure can minimize, if not totally eliminate, common method bias concerns. Nevertheless, since the abovementioned variables addressing phenomena at the team level were all assessed from the perspective of supervisors, we conducted two additional analyses to alleviate the potential issues related to common method bias (Podsakoff, MacKenzie, & Podsakoff, 2012): Harman's single factor test and Lindell & Whitney's (2001) marker variable test.

## Measures

**HR systems.** Commitment and compliance HR systems ( $\alpha=.82$  and  $\alpha=.92$  respectively) were measured using 10 items each from an instrument developed by Nishii et al. (2008). The scale was completed by the supervisor. We chose to focus on the supervisor as the most probable enactor of HR practices (e.g., Purcell & Hutchinson, 2007), capturing the line manager's attributions of HR systems and practices. The scale asked specific questions about business/strategic goals underlying HR (e.g., service quality versus cost reduction) and employee-orientated philosophy (e.g., well-being versus exploitation) in various HR practices such as training, hiring, rewards, etc. Each HR practice started with the flavor text, for example, for the training practice: "[Company name] provides employees the training that it does", then the sample item for commitment was "... in order to help employees deliver quality service to customers" and the sample item for compliance was "... to try to keep costs down". The response scale ranged from 1 ("very inaccurate") to 7 ("very accurate"). While the intended HR system should be the same across a single organization, prior research

indicated that perceived practices related to the enacted HR systems vary across different organizational units (Boon et al., 2019; Nishii et al., 2008; Ostroff & Bowen, 2016).

***Perceived relational climate.*** Perceived relational climate (communal sharing and market pricing;  $\alpha=.75$  and  $\alpha=.81$  respectively) was measured using a 16-item (8 items for each climate) instrument developed by Haslam & Fiske (1999). The scale asked line managers to rate how they perceived relationships in the workgroup. We opted for the line-manager lens as it has long been theorized that line managers have an important role in co-creating the climate in place and are the key individuals that convey the ‘message’ implied by the climate to their team members (James & Jones, 1974; Grojean et al., 2004). The block was introduced by the following text: “Please rate the relationships among the people in your team on each of the following items”. An example of a communal-sharing item is “People in the team make decisions together by consensus” and for market-pricing “Team members expect to get the same rate of return on their effort and investment that other people in the team get”. The response scale ranged from 1 (“very untrue of these relationships”) to 7 (“very true of these relationships”).

***Team creativity.*** Team creativity was measured using 13 adapted items from Zhou and George (2001) ( $\alpha=.88$ ). The scale asked line managers to rate how they perceived creativity on the team level. A few examples of items are “Employees in my team suggest new ways to achieve goals or objectives” and “Employees in my team suggest new ways to increase quality”. The response anchor ranged from 1 (“not at all characteristic”) to 5 (“very characteristic”).

***Individual creativity.*** Individual creativity was measured with 13 items developed and validated by Zhou and George (2001) ( $\alpha=.90$ ). The scale asked individual employees to rate themselves in terms of to what extent they perceived themselves as being creative. An example of a question is “I promote and champion ideas to others” and also “I suggest new ways to achieve goals or objectives”. The response scale was the same as for team creativity.

## Results

Descriptive statistics (means, standard deviations, and correlations among key variables, along with coefficient alphas on the diagonal) can be found in Table 1.

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Insert Table 1 about here



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We began by observing the factor structure of the focal variables at the individual level and thus we conducted a confirmatory factor analysis (CFA) using MPlus 7.4 (Muthén & Muthén, 1998-2012) with maximum-likelihood estimation procedure. The expected one-factor solution of individual creativity displayed an adequate fit with the data ( $\chi^2_{(58)} = 125.412$ , CFI = .96, TLI = .95, SRMR = .04). The standardized factors loadings ranged from .45 to .76. Due to the small sample size at the team level, the full-model multi-level CFA was not conducted (Wolf, Harrington, Clark, & Miller, 2013).

As mentioned, we also conducted two post-hoc tests for potential effects of common method bias. First, we conducted Harman's single factor test – a principal component analysis of all items of our constructs at the team level, where common method variance could potentially be problematic, extracting only one factor and using no rotation method. No dominant factor emerged; the overall variance explained by the extracted factor was below the threshold of 50% (specifically, it was 18.07%), thus providing no evidence that common method bias might be an issue.

Second, we applied Lindell & Whitney's (2001) marker variable test, using a theoretically unrelated variable (i.e., marker variable) to adjust the correlations among the principal constructs in the model. Any high correlation of the marker variable with any of the study's other principal constructs would indicate potential common method bias. For robustness, we repeated the marker variable test separately with two variables that were not included in the model at the team level (supervisors' age and education) for which we had little or no theoretical basis to expect a relationship with the study's principal constructs. The average correlation between the study's principal constructs for supervisors' age ( $r = .215$ ) and education ( $r = .154$ ) was low and, even more importantly, non-significant, thus providing no evidence of common method bias.

### ***Cross-level interaction analysis***

The data set consisted of three hierarchically nested levels: 282 employees (level 1) nested within 69 groups (level 2), each of which had one group supervisor/line manager, nested within 38 organizations (level 3). We used hierarchical linear modeling (random coefficient modeling) in HLM 7.0 (Raudenbush, Bryk, & Congdon, 2004) to test the following aspects of our multi-level model, which built on a set of multi-level models based on the incremental improvement procedure that Hox (2010) proposed. First, we checked the

existence of a multi-level structure; second, the cross-level effects of relational climates and HR systems on individual creativity; and lastly, the interaction effects between relational climates, HR systems, and individual creativity.

The fixed effects with robust standard errors for all models are presented in Table 2. We started with the intercept-only model, which uses individual-rated creativity as the dependent variable (Model 0). Following this null model, we first inserted the communal-sharing climate (Model 1a) and market-pricing climate (Model 1b) as cross-level predictors of individual creativity, respectively. Neither of the two team-level climates as perceived by the line manager exhibited a significant cross-level effect. Next, we added Commitment HR (Model 2a) and Compliance HR (Model 2b), respectively, as additional cross-level predictors of individual creativity. None of them exhibited a significant cross-level effect either.

Finally, we tested the interaction hypotheses. Model 3a examined commitment HR, the communal-sharing climate and their interaction as predictors of individual creativity. The interaction was not significant (interaction term = .07, *n.s.*), thereby not supporting Hypothesis 1a. In Model 3b, we investigated compliance HR system, market-pricing climate and their interaction, which was also not found to be significant (interaction term = .01, *n.s.*), thereby not supporting Hypothesis 2a.

As supplementary analyses, in Model 4, we tested for the interaction between commitment HR system and communal-sharing climate; this interaction was also not significant. We also tested for the interaction between compliance HR system and communal-sharing climate (Model 5), which was, once again, not significant.

### ***Team level analysis***

As the team level sample was small – in our case, consisting of 69 teams – we used a variance-based partial least squares (PLS) procedure to analyse our data, which has been fruitfully employed as a modeling approach in management research (Cording, Christmann, & King, 2008; Henseler, Ringle, & Sinkovics, 2009). PLS is appropriate for relatively small samples. It enables the assessment of indicator and construct reliability as well as correction for measurement error (Bagozzi, 1994; Hair, Ringle, & Sarstedt, 2011). Covariance-based structural models require large samples, usually over 200 units, to achieve good estimates of model parameters (Marsh, Hau, Balla, & Grayson, 1998). On the other hand, PLS is much less demanding; some authors suggest sample sizes of between 20 to 30 to be acceptable (Ned & Pierre, 2018), as the power in the analysis is maximized (Birkinshaw, Morrison, & Hulland,

1995) and does not require assumptions about multivariate normality (Fornell & Bookstein, 1982). Given our sample size (team  $n=69$ ), the use of an analytical technique that maximized power while permitting simultaneous estimation of path coefficients seemed prudent. We used SmartPLS 2 software to carry out the analyses (Ringle, Wende, & Will, 2005). Besides, we used bootstrapping with 500 subsamples to generate t-values (Chin, 1998).

In Figure 2 we present the path coefficients for the PLS model. These statistics are standardized regression coefficients and are interpreted similarly to regression analysis coefficients. Also reported are squared multiple correlation coefficients ( $R^2$  statistics) for all constructs. In contrast to other covariance structure analysis modeling, the primary objective of PLS is to minimize errors, meaning there are no overall goodness-of-fit statistics for PLS models. The model is evaluated based on strong indicator loadings,  $R^2$  values, and the significance of structural paths (Chin, 1998). There is a positive relationship between communal-sharing climate and team creativity ( $b = .351$ ,  $p < .01$ ), but not with commitment HR system ( $b = .016$ , n.s.). Turning to hypothesis testing, Hypothesis 1b suggested that team creativity will be higher in an interplay where strong commitment HR systems and strong communal-sharing climate exist. Unfortunately, the interaction proved to be non-significant ( $b = .111$ , n.s.). Market-pricing climate is negatively related to team creativity ( $b = -.291$ ,  $p < .05$ ), but compliance HR is not ( $b = -.073$ , n.s.). Hypothesis 2b, which suggested that team creativity is higher under a condition of weak compliance HR systems and a strong market-pricing climate, was not significant ( $b = -.021$ , n.s.).

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Insert Figure 2 about here

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### ***Team level supplementary analyses***

Because the small sample size could prevent the interaction effects at the team level from being statistically significant, we explored the conditions of low and high HR systems and relational climates (obtained using the split means approach, e.g., splitting the sample into the condition of low *versus* high level, below or above the mean, on each construct) and the levels of team creativity in those conditions. Using these conditions as independent variables in one-way analysis of variance (ANOVA), a significant interaction effect was found between commitment HR and communal-sharing climate on team creativity ( $F[1,61] = 4.246$ ,  $p < .05$ ), as well as a significant interaction effect between compliance HR and market-pricing climate

on team creativity ( $F[1,61] = 4.831, p < .05$ ). The team creativity means were higher in the condition of high *versus* low market-pricing climate (when the compliance HR system was low; mean of team creativity in these conditions was 3.86 versus 3.14). The team creativity means were also higher in the condition of high *versus* low communal-sharing relational climate (when the commitment HR system was high; mean of team creativity in these conditions was 3.89 versus 3.15).

## Discussion

Anchored on the context approach and bringing together the literature on HR systems and creativity, we developed a multi-level model that examines the effects of cross-level interactions between specific HR systems and their corresponding relational climates in approximating supportive contexts for creativity at multiple levels. Even though the results of our two-level two-source field study are generally inconsistent with our predictions, interesting findings were revealed regarding the isolated and joint roles of the HR systems (compliance, commitment) and relational climates (communal-sharing, market-pricing) in predicting individual and team creativity. Contrary to expectations, cross-level interactions in HLM were insignificant and not supported; however, the communal-sharing climate was found to positively predict individual creativity. PLS results could also not support the interactions predicting team creativity. Although not explicitly hypothesized, examining the direct effects, the communal-sharing climate positively predicted team creativity as well. In turn, the market-pricing climate was negatively related to this outcome.

Supplementary analyses with ANOVAs using the split-means approach provided an additional in-depth examination of the conditions conducive for fostering or stifling creativity. Team creativity was found to be highest in two different conditions – the first one characterized by high levels of market-pricing relational climate and low levels of compliance HR system, and the second one by high levels of both communal-sharing climate and commitment HR system. While individual and team creativity are generally isomorphic (e.g., exhibiting similar characteristics and being predicted by the same antecedents) across levels, some important nuances can be found by a thorough examination of these interactions.

A possible explanation for this lack of hypotheses support might be the fact that we did not capture the strength of either HR systems (Bowen & Ostroff, 2004) or relational climates, which might be of core importance for the proposed interactions. Prior literature suggested that discretionary behaviors (e.g., creativity) and motivation are often stimulated by

a strong HR system (Bowen & Ostroff, 2004). Further, we suspect that HR systems and relational climates exerted different effects as respondents were from various functional areas and industries. Thus, employees' perceptions varied, which affects respondents' interpretations about the prevalent organizational context and how it is relevant to their creativity. Theoretical assumptions can thus be made about the supplementary or complementary fit between individuals and organizational context (Cable & Edwards, 2004). In other words, there might be an alignment or misalignment between individual behaviors and the message of the context. Another plausible reason might be due to the person-context interaction approach. Individuals with different creative traits, orientations (e.g., learning, performance), and personalities may react positively or negatively to particular situational cues (Shalley et al., 2004).

### ***Theoretical Contributions***

A great deal of prior research has emphasized the direct role of organizational context factors in influencing creativity; however, research into the effects of cross-level interactions of context elements on either fostering or suppressing creativity is lacking in the relevant literature. Therefore, our paper has two key theoretical contributions, to the creativity and context literature.

First, this study contributes to the creativity literature by exploring creativity at individual and team levels, as rated through self-perceptions of employees at the individual level *versus* through perhaps a more objective account of supervisory perceptions of creativity in teams (Ng & Feldman, 2012). Traditional creativity research is based on (organizational) psychology and predominantly treats it at the individual level, while newer conceptualizations adopt a collective view where individual and team creativities are intimately related (Cirella, Radaelli & Shani, 2014; Bogilović & Černe, 2018). Our research that investigates creativity in the same research model simultaneously goes along the integration of these two perspectives.

Furthermore, we proposed that the designed (HR system) and emerging (relational climates) context may enhance or stifle the process of social interactions that translate into individual and team creativity (Mumford, 2000; Oldham & Cummings, 1996; Shalley, Gilson, & Blum, 2000). Our results suggest that the emergent relational climate as perceived by the line manager is more important than purposefully designed HR systems, which might fuel the argument about intended *versus* emergent context factors that has so far received sparse

attention in the literature (Batistič et al., 2016) and can offer insights about the significance of employing an integrative strategy (Andersen & Nielsen, 2009).

An explanation of why this is the case might involve the nature of teams as relational hotbeds for creativity (Mueller & Cronin, 2009; Reis, Collins, & Berscheid, 2000). In other words, line manager goals, values and examples might favor team level outcomes (e.g., creativity). Thus, the relational climate is likely to emerge and is fostered by line manager behaviors (Kozlowski & Doherty, 1989). Line managers are usually the enactors of HR practices and transmit the values of work climates (e.g., helping; Purcell & Hutchinson, 2007) through their behaviors (Mathieu et al., 2008). This provides us with two important lessons. In the first instance, it seems that the localized context, in the form of the emerging process led by the line manager, might be crucial for fostering team creativity. This also suggests that perhaps the focus should be more on team climates (Eisenbeiss, Van Knippenberg, & Boerner, 2008) and processes rather than looking at the big picture of organizational climate (James & Jones, 1974). For example, creativity literature has already highlighted the importance of line manager support (Eisenbeiss et al., 2008). What seems to count is team dynamics and line managers perceptions towards a more localized climate, as supported by our results.

This leads to the second lesson. It may be worth reconsidering how HR systems at the higher level are operationalized, designed and delivered to enhance or stifle some individual and line managers' behaviors (Nishii & Wright, 2008). It might be that general HR systems such as commitment and compliance, simply do not provide a strong message that can be captured by the line manager. We are not arguing that such systems are redundant; rather, HR scholars need to acknowledge specific contexts and outcomes. For example, if creativity is the desired outcome, HR systems, bundles or subsets of systems that look specifically at managing relationships at work (Kang, Morris & Snell, 2007) might be more suitable and could serve as a subset of broader HR systems in place. Research has already found that relational HR bundles might shape social relationships at work and knowledge sharing (Kaše, Paauwe, & Zupan, 2009). Thus, it may be worth considering to focus on such subsets and explore them in a non-additive way – independently (Boon et al., 2019) or as more focused HR systems – e.g., looking at relational shaping in teams (cf., Kang, Morris, & Snell, 2007).

Another noteworthy finding in this stream of thought is that individual and team creativity were shown to be rather isomorphic – directly influenced by the relational climates and HR systems in the same manner. At the outset, we pointed out two opposing perspectives

that can be found within the creativity field regarding the isomorphism of individual and team creativity; the first one claiming that they are isomorphic (cf., Pirola-Merlo & Mann, 2004; Taggar, 2002), and the second one that they are not (cf., Bissola & Imperatori, 2011; Drazin et al., 1999). Our reasoning in the theory and hypotheses development section went in line with the first stream of research, which was also later confirmed by our tests – that indeed the same contextual interplay of climates and HR systems predicts creativity at two different levels (in perceptions of two different raters: self-perceptions of individual creativity and supervisor perceptions of team creativity) in a similar manner. This contributes to the discussion around different characteristics of creativity at the individual and team levels (cf., Bogilović, Černe & Škerlavaj, 2017) by supporting the fact that similar antecedents apply across levels. However, this does not necessarily mean that team creativity is merely a linear ‘product’ of creative individuals. Despite sharing similar contextual antecedents, low correlation between individual and team creativity found in our study implies an integrative approach according to which individual creative skills, team dynamics, and organizational solutions interact with each other to produce a collective creative performance at the team level (Bissola & Imperatori, 2011; Pirola-Merlo & Mann, 2004).

Turning to our second main contribution; to the best of our knowledge, our study represents the first empirical attempt to study the cross-level effects of two coexisting factors of the broader organizational context, i.e., intentionally designed HR systems *versus* emerging relational climates. In our multi-level model, we consider context as a configuration of factors and stimuli at different levels (Johns, 2006, 2017); HR systems and relational climates. Further, applying multi-level modelling allowed for the testing of cross-level context effects (controlling for the effects of nestedness into teams and organizations), which provides a more precise overall understanding of the broader organizational context role in creating settings that either encourage or restrain creativity at different levels, thus, more robust conclusions and valid insights.

Even though our results showed that cross-level interactions among HR systems and relational climates were not significant, interesting findings concerning the importance of the relational model theory in influencing attitudes and behaviors within companies were revealed (Fiske, 1992; Fiske & Haslam, 2005). Our proposed interactive contexts to predict both team and individual creativity were shown not to promote creativity, at least not in the way we hypothesized. For example, the context where a strong commitment HR system is jointly present with a strong communal-sharing climate can generally not be adopted to encourage

either team or individual creativity. Something similar is true for contexts where a weak compliance HR system interacts with a strong market-pricing climate.

The current findings point to some potentially interesting speculation. Bowen & Ostroff (2004) suggested that motivation and discretionary behaviors (e.g., creativity) are often stimulated by a strong HR system. In our case, the strength and role of the HR system did not seem to match with the predictive role of the relational climate. This suggests theoretical assumptions about the supplementary or complementary fit between the individual and context (Cable & Edwards, 2004). Therefore, we speculate that the best fit or alignment between designed and emerging context (Batistič et al., 2016) might still be achieved; however, the context in place needs to be able to deliver its message to the line manager. This can probably be achieved only if more localized HR practices or subsystems are used (Liu et al., 2017) and if such a fit between the two can be perceived by the line manager as a result.

### ***Practical Implications***

As firms continuously call on their teams and individuals to be creative, it becomes crucial to realize the context in which their organizational members work. Given the conclusion that emergent relational climates pay off more than planned HR systems in predicting creativity, it is worthwhile to consider creativity in relational settings. Our results show that line manager perceptions of a communal-sharing climate, which fosters a positive and helpful environment, are related to higher team creativity. Therefore, executives are strongly recommended first to recognize and understand the prevalent relational climate that permeates their organizations (Johns, 2006) through structured observation and close monitoring, but also by appointing line managers that are on board with specific climates that need to be delivered and reinforced. This can be achieved through specific recruitment and selection practices to enhance person-environment fit (Sekiguchi, 2007) or, more drastically, by changing the climate in place. In this instance, however, policymakers should be aware that this is a tedious process that also necessitates a thorough understanding of unwritten norms and beliefs within the organization and especially among line managers (Schneider et al., 2013).

As soon as the relational climate is well grasped, managers can design a fitting HR system that complements and corresponds to the identified relational climate. For example, based on our additional results, since a communal-sharing relational climate positively predicts individual and team creativity, HR managers should consider strong HR systems and



facilitating practices that communicate clear signals of autonomy, unity, sense of collaboration, knowledge sharing, openness to ideas, safety, and feelings of trust, in order to enhance individuals' and teams' perceptions of a communal-sharing atmosphere (Choi, 2004; Farr & Tran, 2008; Mueller & Cronin, 2009) and ultimately encourage creative idea generation.

### *Limitations and future research paths*

Inevitably, this study has limitations that need acknowledgement through future research extensions. First, narrowing our focus to HR systems and relational climates excludes other potential context conditions that might influence creativity at multiple levels. A potential research avenue might be through extending this combination to include, for example, perceived organizational support or organizational culture (Schneider, Ehrhart & Macey, 2013). Also, other plausible variables at the team level, such as team cohesion or team complexity might be considered. Another suggestion is to focus still on the contextual variable but broaden the potential interplays between the HR systems and relational climates, trying to theorize also about other possible combinations using relational climate or HR system we did not tackle. For example, productivity-based HR systems, characterized by individuals hired outside the companies, who already possess high-level general skills (Lepak & Snell, 1999, 2002), complemented with a communal-sharing climate could potentially also be positively related to creativity. Alternatively, we could match commitment HR systems and market pricing climate. Such misalignment between the two could explain which context is more important and/or how the misaligned message between contexts relates to creativity at various levels. We believe that exploring other (mis)-matched contextual situations could further enrich our understanding of how the designed and emerging context interplay works towards individual or team creativity.

Second, the cross-sectional nature of our research design limits causal conclusions. Our findings thus point to the need of conducting a longitudinal study design to infer causality, or a field or experimental design (Ployhart & Vandenberg, 2010) to delve deeper in observing the nuances between individual and team creativity and further investigate their isomorphism (as per our results) to gain more fine-grained conclusions.

Thirdly, generalizing findings might be compromised because of relying on a self-reported individual creativity measure, although this issue was mitigated by analyzing creativity construct at the team-level, which was supervisor reported. In this respect, our study

addresses the issue of creativity self-perceptions versus more objective, supervisory assessments (cf., Ng & Feldman, 2012). Future studies could apply a research design that would include aggregated values of employee perceptions of relational climates (to directly examine the processes of emergence); line managers', middle managers' or HR managers' perceptions of HR systems; and supervisors' assessments of both individual and team creativity. Such a model would, however, introduce other types of biases, such as reporting both dependent variables using the same source.

### **Conclusion**

Answering scholars' calls to incorporating context theory and adopting a multi-level approach to investigate creativity, this study examines the interaction effects of two major contextual elements; HR systems and relational climates on individual and team creativity. Although the proposed cross-level interplay effects were not supported, this article provides initial evidence that relational climates, specifically, communal-sharing climate, represent effective positive predictors of individual and team creativity. This finding highlights the proposition that emergent factors (specifically, climates) are more important than designed ones (i.e., HR systems) for fostering creativity at both levels. However, if managers grasp the prevalent relational climate well, they could design a fitting HR system communicating corresponding messages that would complement the signals of the relational climate in a particular work setting.

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Figure 1: The Multilevel Model with Hypotheses

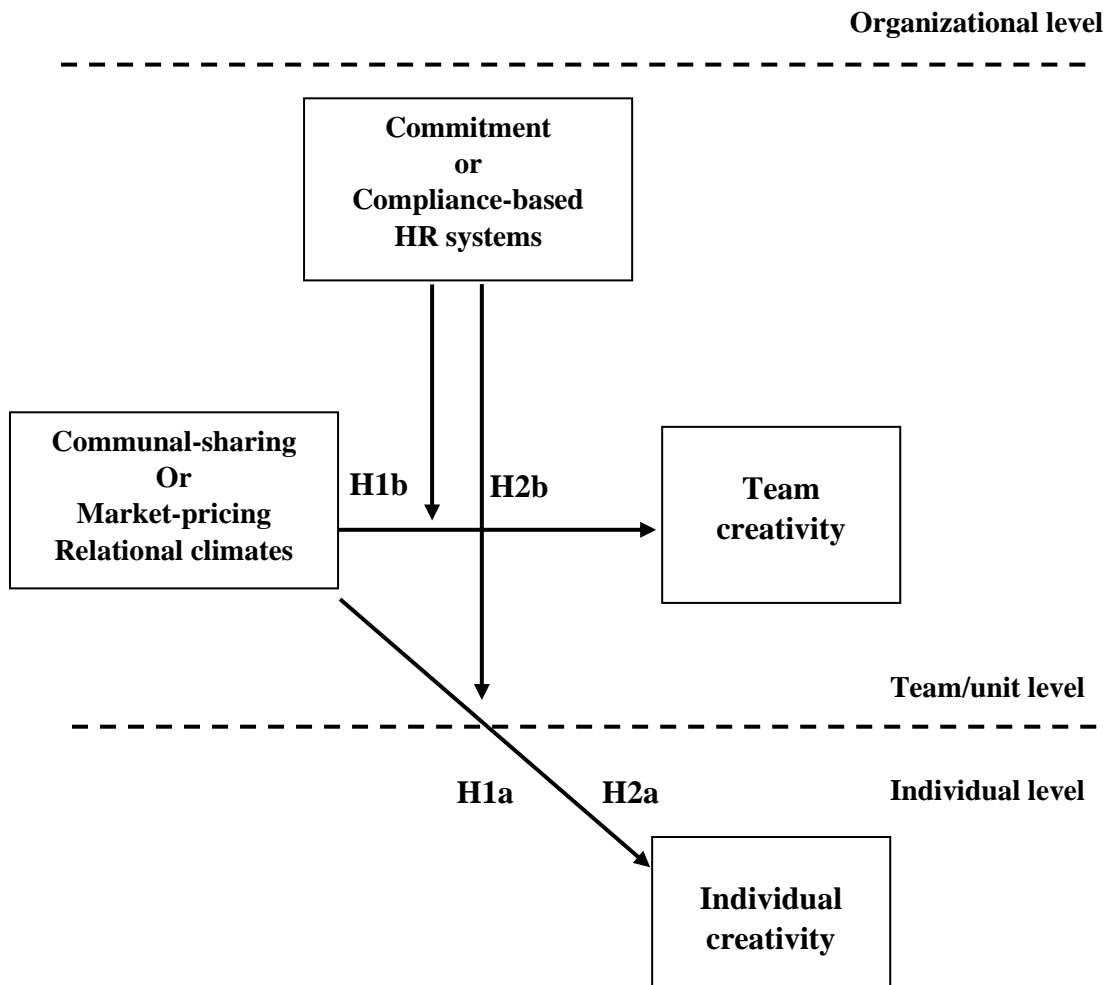
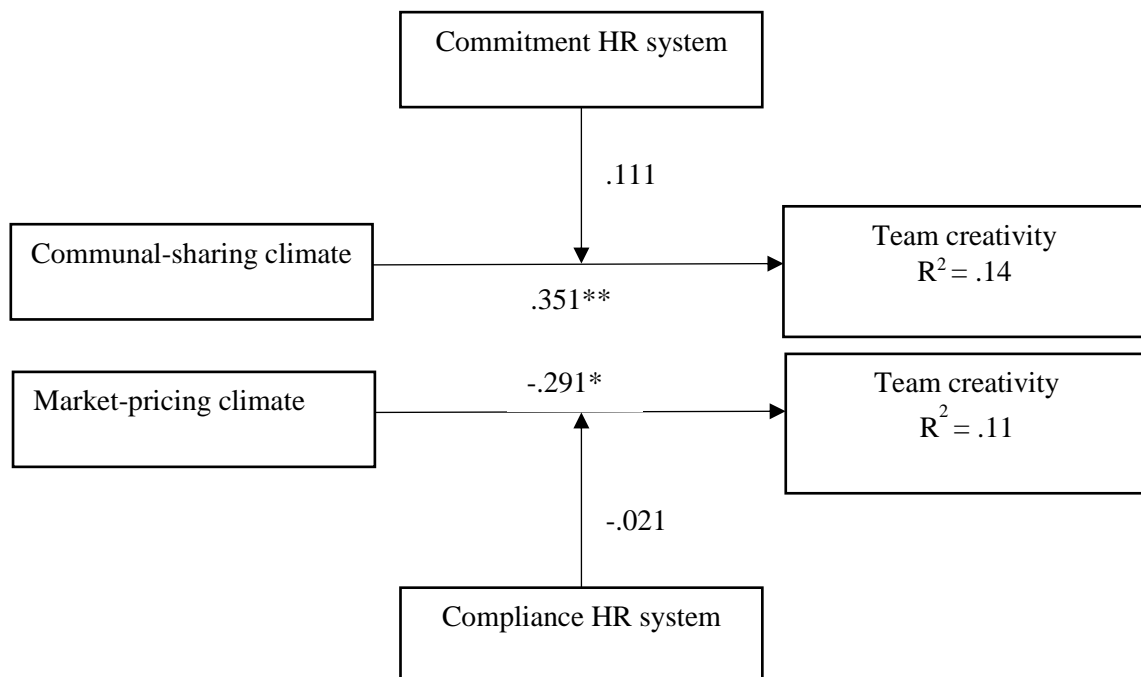


Figure 2: Structural Model Results Predicting Team Creativity



Notes: Standardized parameter estimates are shown. \* $p < .05$ , \*\* $p < .01$ .  $n = 69$ .

Table 1: Means, Standard Deviations and Correlations of/among Focal Variables

Variable	Mean	SD	1	2	3	4	5	6
1 Individual creativity	3.60	.53	(.90)					
2 Commitment HR system	5.15	.70	.06	(.82)				
3 Compliance HR system	3.40	1.16	.14	-.19	(.92)			
4 Communal-sharing climate	5.16	.66	-.09	.21	-.02	(.75)		
5 Market-pricing climate	3.66	.93	.23	-.08	.31*	.05	(.81)	
6 Team creativity	3.50	.51	.02	.06	-.18	.38*	-.34*	(.88)

Notes: \*\* Correlation is significant at the .01 level (2-tailed).

\* Correlation is significant at the .05 level (2-tailed).

Coefficient alpha reliability indicators are in the parentheses on the diagonal.

Commitment HR system, Compliance HR system and Team creativity represent team-level variables. Cross-level correlations were calculated using the HLM 7.0 software.

Table 2: Multilevel Analyses Results (with Individual Creativity as Dependent Variable)

	<b>Model 0</b>		<b>Model 2a</b>	<b>Model 3a</b>	<b>Model 1b</b>	<b>Model 2b</b>	<b>Model 3b</b>	<b>Model 4</b>	<b>Model 5</b>
	<b>Null model</b>	<b>Model 1a</b>							
Intercept	3.57** (.03)	3.58** (.03)	3.57** (.04)	3.58** (.03)	3.57** (.03)	3.57** (.04)	3.58** (.04)	3.58** (.04)	3.58** (.04)
Commitment HR			-.24 (.45)	-.27 (.43)				-.00 (.25)	
Compliance HR						-.09 (.15)	-.07 (.13)		-.04 (.19)
Communal-sharing climate		-.12 (.17)		-.39 (.44)					-.02 (.12)
Market-pricing climate					.23 (.33)	-.06 (.13)	-.05 (.11)	-.14 (.34)	
<b><i>Interaction effects</i></b>									
Commitment HR × Communal-sharing climate				<b>.07 (.08)</b>					
Commitment HR × Market-pricing climate								.02 (.06)	
Compliance HR × Communal-sharing climate									.00 (.04)
Compliance HR × Market-pricing climate							<b>.01 (.03)</b>		
Deviance	455.219	457.342	460.004	464.569	465.342	458.043	470.362	466.430	468.732

Notes: Entries are estimations of fixed effects with robust standard errors. \*\* Significant at the .01 level.  $n$  (level 1) = 282;  $n$  (level 2) = 57;  $n$  (level 3) = 38 in all multilevel models due to HLM deleting cases with missing data during the analyses. Values in bold are relevant for tests of hypotheses