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Creativity, Innovation and Organizational Performance: Does HRM Bind Them Together?

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Abstract

The relationships between creativity-innovation and firm performance are not at all new, but still call for thorough investigation. This paper combines insights from strategic human resource management and organizational behavior to examine how Human Resource Management can facilitate creativity and innovation, thus also bolstering firm performance. Specifically, we argue that commitment-based human resource practices enhance creativity itself, but also support the transformation of creativity into innovation by generating a social climate that advances knowledge sharing behavior. This paper contributes to the literature by delineating the mechanisms through which Human Resource Management influences key organizational resources, thus better honing the creativity-innovation-performance relationship. In today's dynamic economic reality, these conclusions can help managers improve employee performance and hence that of their firms.

Keywords: *creativity, knowledge sharing, innovation, performance, HRM*

1. INTRODUCTION

The relationship between creativity-innovation and organizational performance is not new but requires an in-depth understanding of the role of Human Resource Management (HRM) in bringing them together. This paper presents a comprehensive summary and integration of much past literature in the fields of creativity, innovation and human resource management into a simplifying model.

The prime role of HRM is often depicted as enabling and facilitating different work-related components to achieve higher performance. In this view, creativity can be developed into applicable utilities; i.e., innovation, and contribute to firms' success in terms of better performance in the form of higher profits, lower production costs, more efficient working procedures, and better relationships with customers. The problem with this premise is that although this association is well documented, much less is known about how it operates, the ways in which creativity be transformed into innovation and the mediators involved. How can creativity be facilitated? How can creativity become innovation? How do both of them affect firm performance? These questions are still valid even after years of rigorous research. Here, we address these important issues by exploring the underlying processes. In so doing we respond to the call to combine insights from Organizational Behavior (OB) and

organizational strategy to unveil the psychological micro-foundations of strategy (Ployhart and Hale, 2014). It was only recently that OB has made inroads into organizational strategy, and there is a need to further advance this approach, especially in the case of the complex relationship between creativity/innovation and performance.

Specifically, we explore how creativity can be utilized by a firm to improve its performance by taking an OB perspective on the Resource Based View (RBV), a more up-to-date approach that focuses on advancing organizational human capital and social exchange theory, thus emphasizing the psychological effects of the social environment. We demonstrate how creativity, innovation and performance are related and suggest ways that HRM practices can be used to develop employees' creativity to create a suitable climate that can alleviate the impact of obstacles to the transformation of creativity into innovation.

Numerous studies have shown that a firm's knowledge base gains from employees' new ideas (creativity) to promote innovation (Nonaka & Takeuchi, 1995). In other words, employees' creativity is the cornerstone for innovation. We argue that HRM practices; i.e., high performance/commitment (Huselid, 1995) play a major role in extending employees' knowledge and improving their skills. This directly impacts creativity (human capital), and also indirectly promoting Knowledge Sharing behavior (KS) (social capital), which we believe is a prime facilitator of innovation.

The social interaction process inherent to KS facilitates the transformation of creativity (a new idea) into innovation (implementation of that idea), but KS behavior depends on employees' willingness to give of their knowledge to others. By employing commitment-based HRM practices that foster a social climate of cooperation, firms can motivate employees to share their knowledge.

In the following sections we present some fundamental themes from the OB and HRM literature that support our arguments. We conclude this paper with important insights and suggestions for future research and implications for management.

2. HUMAN CAPITAL AND THE RESOURCE BASED VIEW (RBV)

Human capital is an example of how OB has influenced research on organizational performance, a field that was mainly studied by strategic management experts. In the last two decades, human capital has become an important and valuable strategic resource (Wright, MacMahan, and Mcwilliams, 1994, 2001). It is extremely important to organizations and has consistently been viewed as a driver of performance (Crook, Combs, Todd, Woehr, & Ketchen, 2011). The fact that a firm cannot own human capital, which is an intangible asset, which makes its management more complex, has attracted strategy scholars (Ployhart & Hale, 2014).

Human capital usually refers to the knowledge, skills and abilities (KSAs) embodied in people (Coff, 2002). KSAs include employees' education, training and experiences (Hambrick & Mason, 1984). Ployhart & Moliterno (2011) developed a multilevel model of human capital resource emergence which explicitly states that human capital resources originate from individuals' characteristics. Their model explains how individual knowledge, skill, ability, and other characteristics (KSAOs) contribute to the formation of human capital resources. The process of human capital emergence is modeled as comprising two facets. . The first has to do with the complexity of the task, which determines the extent to which employees need to interact and coordinate their behavior. Task complexity can range from including relatively independent employees to being completely interdependent. When coordination demands are high, the likelihood that human capital resources will emerge from KSAOs is higher. Second, is it assumed that emergence-enabling states are social contextual factors that support or hinder employees' interactions. These states can be behavioral (e.g., backing up behaviors), cognitive (e.g., transactive memory), and affective (e.g., cohesion, trust). Even if a task demands interaction, without these enablers human capital will not emerge.

The Resource Based View (RBV) supplies the theoretical explanation why high quality human capital can lead to superior performance. Several scholars have contributed to this framework but

the most prominent is Barney (1991) who pointed out that firm resources can be considered as enablers of strategy. Resources may be tangible (e.g., financial) or intangible (e.g., human capital). Resources that are rare, valuable, inimitable, and non- substitutable can be sources of sustainable competitive advantage. Valuable resources must be in short supply and semi permanently tied to the organization to provide long- lasting above average performance. If not, competitors can acquire resources that perform the same function and the advantage will be lost (Peteraf, 1993). Factors that can promote inimitability include social complexity (e.g., resources based on interactions between employees), causal ambiguity (e.g., uncertainty with regard to the creation of resources), and path dependency (e.g., historical factors that influence a firm's current state) (Barney, 1991; Dierickx & Cool, 1989).

The knowledge based view that emerged from RBV posits that the knowledge embedded in human capital not only meets the criteria for these types of resources but also ultimately is the only source of competitive advantage (cf. Grant, 1996). Felin & Hesterly (2007) suggested that knowledge resources are firm-specific due to the fact that they are tied to specific people and processes within a firm. Wright et al. (1994) noted that in order to constitute a source of competitive edge, the human capital pool must have both high levels of skill and the motivation to exhibit productive behavior.

As a further development of the RBV, mostly due to the inroads of psychology into strategy, it is well-established today that improved firm performance and sustained competitive advantage are the outcome of a combination of human capital, strategically relevant employees' behaviors, and appropriate HRM practices. These latter support the development of KSAs and aid in aligning the human capital pool with the firm's strategic objectives (Dunford, Snell, & Wright, 2002).

What the current RBV conceptualization suggests is that firm performance is not just an aggregate of actions of individuals, but rather the result of several core competencies including human capital, social capital (internal or external relationships), and organizational capital (i.e., processes, policies, technologies) that create knowledge (Snell, Youndt, & Wright, 1996). These "knowledge repositories" complement and affect one another (Youndt & Snell, 2001). Thus for a firm to achieve its desired competitive advantage, it must take into account the interplay among these three components.

RBV was instrumental to the development of the strategic human resource management (SHRM) field because it shifted the focus of strategy research from factors outside the firm to internal resources as the medium for competitive edge (Hoskinsson, Hitt, Wan, & Yiu, 1999). This positioned human resources at the core, thus solidifying the importance of the HRM function.

SHRM is somewhat difficult to define, but there is a general consensus that it is:

> *"…the pattern of planned human resource (HR) deployments and activities intended to enable an organization to achieve its goals."* (Wright & McMahan, 1992, p. 298).

That is to say, SHRM focuses on HRM practices that firms develop and how they align them to support their strategy. In the following section, we deal with HRM practices.

3. COMMITMENT- BASED HR PRACTICS

3.1 The contingency approach

The literature on SHRM deals with ways to enhance desirable organizational outcomes (Jiang, Lepak, Hu, & Baer, 2012). A well-known perspective is the contingency approach (Jackson, Schuler, & Rivero, 1989) which argues that organizations use HRM practices (also known as high performance/commitment work systems) to encourage employees' behavior to facilitate goal attainment (Becker & Huselid, 1998). The firm selects HRM practices that fit its goals (employee cooperation or efficiency). Their success is contingent on having employees behave in ways that foster attainment of firm's objectives (Becker & Huselid, 1998).

3.2 Commitment-based HR practices

It is believed that although HRM practices are highly varied, they can be categorized into several sub-dimensions (Jiang et al., 2012). One such categorization distinguishes between transaction based

HRM practices and commitment based HRM practices. Transaction based practices emphasize individual short term exchange relationships; commitment based practices focus on long term investment in employees and maintaining an organizational atmosphere that strengthen employees' commitment to their workplace (Tsui, Pearce, Porter, & Hite, 1995). In the SHRM line of research these practices are called the high performance/investment HRM approach. This approach underscores firms' will to create new and unique in-house knowledge and skills, and facilitate employees' motivation and discretion (Lawler, 1992).

The specific practices that form a commitment based approach may vary, but generally include training programs and performance appraisals that emphasize the development of firm- specific knowledge, team work, and long term growth, compensation practices that align employee motivation with group-organization objectives, selection practices that assess employees' suitability to the firm rather than to a specific job (Tsui, Pearce, Porter, & Tripoli, 1997; Delery & Doty, 1996).

Studies have shown that there is a positive relationship between commitment based practices and firm performance in diversified organizations (e.g., Youndt, Snell, Dean, & Lepak, 1996; Batt, 2002). High commitment HRM practices have profound effects on performance outcomes in terms of higher productivity and quality, a lower turnover rates, and a lower scrap rate (MacDuffie, 1995). Through these practices, employees feel that the firm invests highly in them, their motivation to contribute is increased, and they are more willing to aid the firm in achieving its strategic goals (Rousseau, 1995).

Taken together, we believe that commitment-based HRM practices play a pivotal role in both the quest for valuable, rare and hard to replace human capital and in creating the conditions for a cooperative workplace environment in which the value of the existing human capital potential can be realized. In the following sections, we show how these practices can impact two of the most fundamental resources of a firm: creativity and innovation.

4. CREATIVITY AND COMMITMENT-BASED PRACTICES

4.1 Definition of Creativity

In the field of OB, several researchers have suggested definitions of creativity. For instance, Farid, El-Sharkawy, & Austin (1993) suggested that creativity is the production of new and useful ideas, whereas Brennan & Dooley (2005) emphasized the originality of creativity and claimed that creativity is a combination of elasticity, originality and thought sensitivity that allow the individual or a team to think outside of the box. West (2002) focused on the place where creativity occurs: inside the individual. He claims that:

> "*…creativity is a cognitive process in which events occur within the person*" (p.11).

Amabile (2000) put forward the dominant definition, which constitutes a conceptual integration of the three definitions above. She suggested that creativity is:

> "*…the production of novel and useful ideas by individuals or teams of individuals…where the idea is appropriate, useful and actionable*" (p. 80).

Of what we know about creativity, it is a process of thinking and producing new and useful ideas (Amabile, 2000).

4.2 Commitment-based practices impact on creativity

Commitment-based HRM practices are assumed to relate directly and positively to creativity. These practices can improve the quality of human capital by expanding employees' knowledge and by motivating them to have a sense of autonomy, thus enabling them to become more effective at creating new ideas and solving problems (Jiang et al., 2012). Specific commitment-based practices can impact creativity through:

1. Selection – which can augment human capital by hiring talented and creative people who have the necessary skills the firm needs (Jimenez-Jimeneza

& Sanz-vallea, 2008)
2. Training – which facilitates learning in firms and helps to build a better knowledge pool by enhancing employees' knowledge and skills that are needed for creative thought processes and task domain expertise (Mumford, 2000)
3. Performance appraisal – appraisal that includes clear feedback and mistake toleration that helps convey precise information to employees on the disparities between their performance and the desired goals (Jaing et al., 2012) and also signals to employees that the firm expects them to engage in learning (Nonaka, 1994), thus prompting employees to work more creatively
4. Reward systems – which push employees to make an extra effort and attracts creative people to the firm (Jiang et al., 2012)
5. Job design – which can contribute to employees' creativity by increasing their intrinsic motivation (Shalley & Gilson, 2004). Jobs that are characterized by autonomy and the opportunity to pursue one's own ideas, job enrichment, etc, cause employees to be intrinsically motivated by focusing on the challenge of the job , job satisfaction and enjoyment more than on external demands (Shalley & Gilson, 2004; Oldham & Cummings, 1996). In light of these arguments, we propose:

Proposition 1. Commitment-based HRM practices enhance creativity.

5. DEFINITION OF INNOVATION AS DISTINCT FROM CREATIVITY

5.1 Definition of Innovation

For an idea to be defined as innovative and not as creative, it needs to be developed and transformed into a product, process or service, and be commercialized (Popadiuk & Choo, 2006). Afuah (1998) classified innovation into three categories: 1. Technological – knowledge of components, linkages between components, methods, processes and techniques that go into a product or service; 2. Market – new knowledge embodied in distribution channels, product, applications, as well as customer expectations, preferences, needs, and wants; 3. Administrative – innovations that pertain to the organizational structure and administrative processes.

5.2 Creativity-Innovation: Similarities and Differences

Even though there are considerable differences between creativity and innovation, some use the terms interchangeably (Man, 2001). The three main differences according to West et al. (2004), Amabile (2000), and Mathisen et al. (2008) are:
1. The nature of the process – West et al. (2004) refer to creativity as a cognitive process, and to innovation as a social process;
2. The element of implementation – Innovation includes an element of implementation, creativity does not;
3. Unit of analysis – Mathisen et al. (2008), Amabile (1988) and Staw (1990) indicate that creative performance refers to products and ideas at the individual or team levels. Innovation is the successful implementation of these products at the organizational level.

In spite of their differences, creativity and innovation are related and affect an organization's ability to reach future goals. Empirical support for their relationship can be found in several studies that have employed individual factors such as predictors of innovation (e.g., Pirola-Merlo & Mann, 2004; West & Anderson, 1996). In light of the above, we propose that:

Proposition 2. Creativity relates positively to innovation.

6. THE ROLE OF KNOWLEDGE SHARING IN THE LINK BETWEEN CREATIVITY AND INNOVATION

6.1 Definition of Knowledge sharing

There are different definitions of knowledge sharing; here it is defined as a social interaction involving the exchange of employee knowledge, experiences and skills through a department or organization (Lin, 2007). According to Van den Hooff & Van Weenen (2004), knowledge sharing is a bi-dimensional process that involves knowledge collection and knowledge donation. Knowledge

collection is a process of consultation with others that is intended to encourage them to share their personal intellectual capital. Knowledge donation is a process in which individuals give their personal intellectual capital to others. Knowledge sharing occurs between employees, at the group or organizational levels.

6.2 Types of knowledge

Based on Polanyi (1958, 1966), Nonaka (1994) differentiated explicit from tacit knowledge:

1. Sharing explicit knowledge can be promoted by information technology whereas tacit knowledge is subject to social interaction
2. Explicit knowledge is often in documentary form and is transferred by technology, unlike tacit knowledge that is embedded in social ties; its transfer is varied, but is usually done by direct contact and observation of behavior
3. Explicit knowledge can be reduced to writing easily. It is impersonal by nature, obtained through education and formal practice, and is usually in the form of reports and documents, etc. (Holste & Fields, 2010). Tacit knowledge is personal (i.e., abilities, developed skills, etc.) and cannot easily be reduced to writing
4. Tacit knowledge is acquired by learning through life experience, experimentation and learning by doing (Mascitelli, 2000). This knowledge is described as local, and is strongly rooted in the context in which it developed (Holste & Fields, 2010). Explicit knowledge is not acquired by learning or experience, and is not bound to context.

6.3 Social exchange theory as the basis of knowledge sharing

One key way to conceptualize the relationship between an organization and its employees is based on the social psychology perspective of Social Exchange Theory (Blau, 1964). Social Exchange theory has been shown to account for non-contractual interactions between people in a vast number of domains ranging from market relations, work relations and love (Blau, 1964) to team knowledge sharing (Cummings, 2004). The theory posits that people donate to others in a manner commensurate to what others give to them (Reychav & Weisberg, 2010). The theory sees the "donations" people give to an organization as elements in a mutual arrangement (Gouldner, 1960). Mutual agreements take place when an individual performs an act that benefits some other individual, group or organization. This gesture is made without a specific monetary contract guaranteeing that it will be rewarded (King & Marks, 2008). The person who makes the gesture does so because s/he believes that it will be rewarded in the future, although the exact time and nature of the reward is unknown and unimportant (Van der Vegt & Janssen, 2003). In social exchanges, unlike economic ones, the possible outcomes of behavior are based on the belief that the relationship will be conducted according to previous behavior (King & Marks, 2008). Numerous studies have emphasized the positive outcomes of social exchange in organizations (e.g., Allen et al., 2003; King & Marks, 2008; Liao & Chuang, 2004).

6.4 Knowledge sharing as a mediator between creativity and innovation

There is a general consensus that creativity is a necessary but not sufficient prerequisite for innovation (Amabile, 2012). The innovation process builds upon knowledge sharing and is affected by group dynamics and organizational support (e.g., West, 2002; Agrell & Gustafson, 1996). The process starts with individuals who come up with an idea or recognize an organizational problem (Farr & Ford, 1990). These individuals decide whether or not to share knowledge and suggest their novel ideas to the group for further discussion and development (Agrell & Gustafson, 1996). Kogut & Zander (1992), as well as Nahapiet & Ghoshal (1998) argued that the process of knowledge sharing helps create valuable knowledge within firms by connecting previously unconnected knowledge and ideas or recombining existing knowledge into novel knowledge.

According to Basadur & Gelade (2006), thinking organizations strive for constant innovation; they continuously seek out new opportunities to use their knowledge. Basadur & Gelade (2006) strongly emphasize that only knowledge management in the sense of active sharing of knowledge

can promote organizational learning and innovativeness. They indicate that:

> *"…availability of information is not sufficient. If efficiency, flexibility, and adaptability are to be increased, that information must be put to use."* (p.46).

It is not the mere existence of the knowledge that solves crises or promotes the company but rather knowing how to use it and wanting to do so.

Summarizing this section, for creativity to be exploited for the benefit of the group and the organization as a whole, it needs to be shared and put to use. Thus, we propose that:

> *Proposition 3. Knowledge sharing mediates the relationship between creativity and innovation.*

7. COMMITMENT-BASED PRACTICES AS FACILITATORS OF INNOVATION

Commitment-based HRM practices lay the foundation for organizations' innovative capability. Meta-analyses of RBV have shown that HRM policies are not limited to their direct effects on employee competencies and skills. They have a more comprehensive role in weaving the knowledge and skills of employees together (Snell, Youndt, & Wright, 1996). Subramaniam & Youndt (2005) indicated that:

> *"…unless individual knowledge is networked, shared, and channeled through relationships, it provides little benefit to organizations in terms of innovative capabilities."* (p. 459).

The literature indicates that a commitment-based HRM system is a powerful innovation- facilitating tool in particular through the reinforcement of social ties (Collins & Clark, 2003). Collins & Smith (2006) indicated that commitment-based HRM practices can affect firm performance indirectly by fostering a social climate that motivates employees to share their creative knowledge, and by so doing, transform it to an implementable asset; i.e., innovation. Finally, HRM practices that signal employees that the organization cares about them and wants to invest in them are likely to lead to a similar stance on the part of employees towards the organization and the manifestation of out-role performance such as knowledge sharing (Allen, Shore, & Griffeth, 2003).

8. DEFINITION OF SOCIAL CLIMATE AND ROLE

8.1 Definition of social climate

A social climate is the product of the shared perceptions of employees in an organization regarding formal and informal policies, procedures, and practices (Schneider, Ehrhart, & Macey, 2013). Collins & Smith (2006) defined social climate as:

> *"…the collective set of norms, values, and beliefs that express employees' views of how they interact with one another while carrying out tasks for their firm"* (p. 547).

In other words, the social climate of a firm refers to its employees' shared beliefs regarding the norms that guide their interactions when they work (Ashkanasy, Wilderom, & Peterson, 2000).

8.2 The role of social climate role as a mediator

Intra-firm contextual influences such as social climate are consistent with the notion prevalent in RBV which suggests that firms possess heterogeneous resources that drive competitive advantage (Barney, 1991). Numerous studies on social climate have supported the notion that it moderates the relationship between diversity and firm performance (Dass & Parker, 1999). In a similar manner, social climate has been examined as a mediator of the relationship between HRM policies and firm performance (e.g., Bowen & Ostroff, 2004). An important theme in the innovation field is that good social relationships between employees are necessary to innovation (Collins & Smith, 2006). Burt (1997) stated that:

> *"…while human capital is surely necessary to success, it is useless without the social capital of opportunities in which to apply it".* (p. 339).

According to the RBV, human capital, although very important, has only limited value in the absence of social capital. Coleman (1988) noted that social capital has an important influence on the creation of human capital.

Takeuchi, Lepak, Wang, & Takeuchi (2007) emphasized the importance of the combination of human capital and social capital for achieving organizational goals. These authors conducted a study on a sample of Japanese firms and found that human capital and social exchange mediated the relationship between high commitment/performance systems and firm performance.

Based on Kang et al. (2007), we suggest that commitment-based practices can help create a social climate characterized by cooperation and consisting of cohesion, trust and perceived organizational support (POS). This climate encourages employees to focus on the best interests of the firm rather than on their own objectives, thus fostering knowledge sharing among employees. Cohesion, for instance, facilitates the formation of strong, close ties between employees that motivate them to share their unique, valuable knowledge with their colleagues and organization (Reagans, Zuckerman, & McEvily, 2004). In addition, a work environment that emphasizes trust and mutual dependence tends to reinforce a sense of collectivity (Zhou, Hong, & Liu, 2013). This should lead to more freely transferred knowledge (Moran, 2005) and also guarantees that in time, team members can create communication codes and protocols that improve the communication and ease the transfer of knowledge (Nahapiet & Ghoshal, 1998). All of the above can facilitate knowledge sharing and by so doing promote innovation. In the following sections we discuss exactly how commitment-based HRM practices affect each one of the components forming the social climate and how in turn they can facilitate knowledge sharing.

9. COMMITMENT-BASED PRACTICES ROLE IN CREATING A CLIMATE OF COOPERATION

9.1 Definition of Cohesion

Over the years several definitions have been put forward for the 'elusive' concept of cohesion (Mullen & Cooper, 1994). Despite differing opinions, there is a general consensus that cohesion is a group level variable (Gully, Devine, & Whitney, 1995) as defined by Festinger (1968):

> "*…the total field of forces that acts on members to remain in the group*" (p. 185).

Initially, researchers referred to cohesion as a unidimensional concept (Seashore, 1954), but more recent definitions include both task and social components as part of the shift towards a multidimensional conceptualization (Cota, Evans, Dion, Kilik, & Longman 1995). The well- accepted multidimensional definition Carron, Brawley, & Widmeyer (1998) includes the following dimensions:

1. Individual attraction to group-task: Team members' perceptions of their involvement in a group task
2. Group integration-task: Team members' perceptions of the similarity, closeness and bonding that exists in the group, in the context of a collective task
3. Individual attraction to group-social: Team members' perceptions of their acceptance by the group and their social interaction with the group
4. Group integration-social: Team members' perceptions of closeness and similarity in the group, in a social context.

9.2 Commitment-based HRM practices and cohesion

We suggest that the implementation of commitment-based HRM practices of team work and group-based compensation can have a complementary effect. An emphasis on the team work paradigm can facilitate the consolidation of team members' social ties and a sense of belonging (Hulsheger, Anderson, & Salgado, 2009), thus leading to social cohesion, whereas a group based compensation agenda can strengthen team members' commitment to work together and encourage them to focus on team success and achieving shared goals and objectives rather than on individual aspirations as a means to obtain desired rewards (DeMatteo, Eby, &

Sundstrom, 1998). It may also minimize the occurrence of social loafing (Sheppard, 1993) and favorize the task component of cohesion.

9.3 Definition of trust

Trust is a psychological construct relating to the experiential outcome of interactions between people's values, attitudes, mood and emotions (Jones & George, 1998). It is the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will not misuse this act (Mayer, Davis & Schoorman, 1995). According to Schoorman, Mayer, & Davis (2007), trust is based on these components:

1. Ability – The trustor's belief that the trustee is capable and skilled
2. Benevolence – The intention to do good for the other
3. Integrity – The trustor's belief that the trustee is guided by values of fairness.

Although each component is distinct, total trust necessitates the existence of all. In addition, the trustor's ability to believe in the other is mandatory. Hence, people can differ in their ability to trust others (Schoorman et al., 2007). We believe that commitment-based HRM practices can facilitate a social climate of trust.

9.4 Commitment-based HRM practices and trust

Commitment-based HRM practices such as team work and group based compensation can facilitate a climate of trust between employees by aligning employees' actions with the team's or firm's objectives and insuring that everyone contributes, thus reducing social loafing (Lawler, Mohrman, & Ledford, 1995). An emphasis on training, development, and job rotation also contributes to employee interaction and better acquaintanceship.

9.5 Definition of Perceived Organizational Support (POS)

According to Organizational Support Theory (OST) (Eisenberger et al., 1986, 1990), employees tend to ascribe humanlike characteristics to an organization and see it as a subject with the ability to act. The organization is perceived as responsible for the way organizational jobholders treat employees (Eisenberger et al., 1986). Employees develop high levels of Perceived Organizational Support (POS) when the organization is attentive to their well-being and values their contribution by giving rewards, better working conditions, maintaining procedural justice, etc.

9.6 Commitment-based HRM practices and POS

We believe that commitment-based HRM practices of performance appraisal that focus on employee development, training and development programs, as well as incentive practices (compensation and rewards), communicate to employees that they are appreciated and valued, thus causing them to perceive the organization in a positive manner and act in ways that benefit it. In a similar manner, Allen et al. (2003) showed that HRM practices emphasizing growth opportunities, fairness of rewards, and participation in decision making contribute to employees' sense of perceived support from the firm. Summing up, we propose:

Proposition 4a-c. Commitment-based HRM practices promote a social climate consisting of cohesion, trust, and POS.

10. THE SOCIAL CLIMATE FACILITATES KNOWLEDGE SHARING

10.1 Cohesion and knowledge sharing

When cohesion is high, employees are likely to cooperate with one another and cease to compete, thus enhancing their tendency to share knowledge (Szulanski, 1996). In addition, when cohesion exists, individuals experience a positive psychological state. This leads to perceiving things in a positive way and may increase the propensity for pro-social behavior (George & Brief, 1992). Increased cohesion is expected to lead to a greater willingness on the part of team members to help each other and demonstrate altruistic behavior; i.e., Organizational Citizenship Behavior (OCB) such as knowledge sharing. Thus, we propose

Proposition 5. Cohesion relates positively to knowledge sharing.

10.2 Trust and knowledge sharing

Trust lays the foundation for effective social exchange (Blau, 1964), and can influence knowledge sharing. Social exchange depends to a great extent upon trust, because it involves undefined commitments that cannot be forced (there is no written contract). When trust is high, knowledge sharing should be enhanced because mutual trust between employees enhances a person's belief that the current exchange will lead to later reciprocation (Coleman, 1990). Trust finds expression in knowledge sharing because knowledge seekers must let themselves be vulnerable to colleagues, for instance by acknowledging their lack of knowledge in a specific domain (Gray, 2001). Further, they need to trust colleagues to supply credible and beneficial information (Gray, 2001). Similarly, knowledge donors need to believe that the information will be used properly. Thus, we propose:

Proposition 6. Trust relates positively to knowledge sharing.

10.3 POS and knowledge sharing

Organizational support indirectly affects employee attitudes and behaviors through the creation of a sense of commitment which results in reciprocity. When employees feel supported, they develop a greater global sense of commitment to the organization. Employees feel obligated to reciprocate by helping the organization reach its goals (Eisenberger et al., 2001). Organizations depend on the creation of new ideas that arise from sharing and the application of knowledge in one domain through implementation in another, a process that is facilitated by knowledge sharing (Bartol, Liu, Zeng, & Wu, 2009). Knowledge sharing is usually an act of choice and is a beneficial behavior, not a formal job requirement (Lin, 2010). Research supports the notion that organizational support contributes to these kinds of behaviors (Podsakoff et al., 2000). Thus, we propose:

Proposition 7. POS relates positively to knowledge sharing.

Proposition 8a-c. A social climate consisting of cohesion, trust, and POS is likely to mediate the relationship between commitment-based HRM practices and knowledge sharing.

11. INNOVATION AND PERFORMANCE

Innovation can be evaluated in terms of its effects on organizational outcomes. Previous studies have shown that innovation exploited in an organizational setting can contribute to performance improvement (Artz et al., 2010; Shalley, Gilson, & Blum, 2000; Zimmerman & Darnold, 2009), and that innovative firms outperform non-innovative firms in terms of productivity and growth (e.g., Hall & Mairesse, 1995; De Clercq et al., 2011). We focus here on intra-organizational performance as a proximal indicator of a firm's utilization of its resources. High quality human capital was found to relate strongly to this type of performance in a recent meta-analysis (Crook et al., 2011). For example, in a longitudinal study Roberts (1999) examined the pharmaceutical industry in the US and found that the innovation capability of a firm had a positive effect on its profits. Cho & Pucik (2005) examined the relationship between innovativeness, quality, growth, profitability and market value at the firm level in the US finance industry and showed that innovation contributes to the growth and profitability of an organization. Similarly, Atalay, Anafarta, & Sarvan (2013) found that technological innovation (product and process innovation) had a significant and positive impact on intra-organizational performance in a sample of top level managers of 113 firms operating in the Turkish automotive industry. Thus, we propose:

Proposition 9. Innovation relates positively to firm performance

12. PROPOSED RESEARCH MODEL

Above, we reviewed the underlying direct and indirect HRM practices to account for the association between creativity-innovation and firm performance. We also examined the elements that affect the relationships between creativity and innovation. We discussed high commitment HRM practices (selection and training, performance appraisal, reward system, job design and team work), social climate (cohesion, trust, POS), the nature of KS and

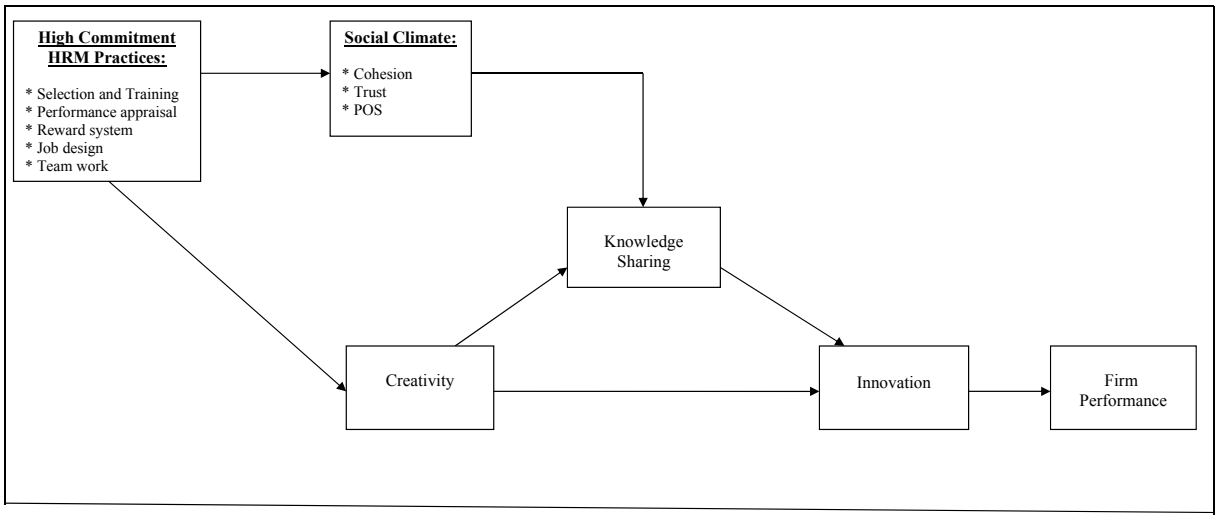

Figure 1: Conceptual Model of the Association between Creativity and Innovation and Firm Performance

knowledge sharing as a mediator between creativity and innovation.

Below, we propose a multivariate theoretical model comprised of these elements to predict firm performance.

13. SUMMARY AND IMPLICATIONS FOR RESEARCH AND PRACTICE

Despite considerable evidence supporting the existence of positive relationships between creativity, innovation and firm performance, much is still unknown. The basic questions raised by Morgeson & Hoffman (1999) and later Ployhart & Hale (2014) still remains valid; namely how do resources at one level contribute to the formation of resources at other levels? As we see it, not enough theory and research have been devoted to the emergence of firm performance from creativity. This may be due to the absence of intersections between the macro (strategy) and micro (OB) literatures. In this paper, we incorporated a combination of RBV and organizational behavior view to shed light on this important issue. We presented a model (Figure 1) which delineates the mechanisms through which HRM practices can improve firm performance. Specifically, we claim that a specific bundle of practices dubbed commitment-based HRM practices (i.e., selection and training, performance appraisals, reward system, job design and team work) impact firm performance through the following processes by: 1. directly enhancing creativity; 2. promoting a social climate supportive of knowledge sharing (which is crucial for innovation). When the innovative capability of a firm improves, so does its performance.

We reiterated the importance of the social environment in an organization. As scholars have indicated, context shapes the nature of the elements, processes, and systems that reside within it (Ployhart & Hale, 2014). Therefore, to exploit the full potential of a highly skilled workforce, social capital is mandatory.

We believe that the proposed model captures the reciprocal relationships between structures and functions of resources at different levels. It shows that a meaningful understanding of workplace phenomena requires integrative approaches that combine multiple levels (Kozlowski & Klein, 2000). With that in mind, it is also clear that much research is still needed. This work provides a foundation for the role of HRM in future research on creativity, innovation and performance.

Here we focused on commitment-based practices. We suggest that future research should examine the effects of other types or bundles of HRM practices on knowledge sharing and innovative process as a whole (Jiang et al., 2012). It is possible that other bundles of practices may exert different effects on creativity and on knowledge sharing,

which are undoubtedly important to discover.

It is also recommended to examine the proposed model empirically. In this regard, comparing samples of employees from different sectors could be of value. It is important to bear in mind that what we suggested here may apply more successfully to high tech firms. This is because the type of employees who form the backbone of hi tech firms, and therefore are crucial to generating superior human capital and achieving competitive advantage are knowledge workers; i.e., scientists, engineers etc. (Grant, 1996). Clearly firms' innovative capability and improved performance are based on their employees' knowledge and willingness to share it. Knowledge workers hold the key to this kind of rare, valuable, and inimitable knowledge (Appleyard & Braun, 2002).

We believe that the practical implications of our model may be considerable. We stress the importance of a fully integrated, strategically aligned HRM system, an underdeveloped function in many workplaces (Lawler & Boudreau, 2009). Further, our model provides managers and HRM practitioners with the means to improve HRM interventions. Effective implementation of the proposed HRM practices can exert an enormous influence over both human and social capital which, are so important to firms' innovative capabilities (Collins & Smith, 2006). These interventions can improve the knowledge and skills of employees, while also shaping an organizational climate that motivates employees to contribute more (Grant & Berry, 2011). In today's challenging economic reality, succeeding on this task may prove decisive.

14. CONCLUSION

In this paper we aimed to provide a better understanding of the creativity-innovation-performance chain. We incorporated insights from different domains to depict a multi-stage mechanism that highlights the important role of HRM practices in advancing firm performance. We also believe that the implementation of our suggestions can bolster HRM practitioners' and managers' efforts to achieve success and prosperity in organizations.

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