Development of a Causal Framework Linking High Performance HRM Practices, Positive Psychological Capital, Creative Behaviors and Performance

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Abstract

Synthesizing the ideas of high-performance Human Resource Management (HRM), positive psychological capital, and componential theory of creativity, the present study develops a multi-level causal framework linking high-performance work practices (HPWP), positive psychological capital, employee creative performance behaviors and creative performance. The paper argues that to provide a convincing explanation of the association between HRM practices and creativity, we need to improve our theoretical understanding in three key areas. These are the nature of HRM, and especially the rationale for the specific lists of HR practices; the linkage between HRM practices and employee creativity; and the 'black-box' linking HRM practices and employee creativity. A model is presented to explore these linkages. The existing literatures on HRM, Creativity and PsyCap are reviewed and directions for future research are provided.

Keywords:

High-performance Work Practices; Creative Performance Behaviors; Employee Creativity; Psychological Capital

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INTRODUCTION

Increasingly turbulent environments, heightened competition, and unpredictable technological changes have brought to the forefront of management cognition the recognition, development and sustenance of employee creativity. Creativity is defined as the production of novel and useful ideas by an individual or by a group of individuals working together (Amabile 1983, 1996; Madjar, Oldham & Pratt 2002; Shalley, Gilson & Blum 2000; Zhang & Bartol, 2010) and has been found to fundamentally contribute to organizational innovation, effectiveness, and survival (Amabile, 1996; Shalley, Zhou, & Oldham, 2004). The resource-based theories of competitive advantage focus on the role employees play in developing and maintaining a firm's competitive capabilities and lay stress on keeping the workforce rightly and appropriately encouraged and motivated (Barney, 1991; Wright & McMahan, 1992; Wright, McMahan, & McWilliams, 1994).

Creativity research can be broadly categorized into two streams: personality research stream and the social-psychological research stream. The personality research stream focuses on characteristics of creative persons such as affect (Amabile, Barsade, Mueller, & Staw, 2005; George & Zhou, 2007; Madjar et al., 2002), achievement orientation (Harackiewicz & Andrews, 1993), personality (Dellas & Gaier, 1970; Joo, 2007; George & Zhou, 2001; Feist, 1998), intrinsic motivation (Dewett, 2007), self-efficacy (Chong & Ma, 2010; Gong, Huang, & Farh 2009) and cognitive styles (Scott & Bruce, 1994; Tierney, Farmer, & Graen, 1999) and analyzes the influence of these individual characteristics on creative performance.

The social-psychological research stream (Amabile, 1983) aims to identify particular social and environmental conditions that influence creativity of individuals. The researchers following this stream have explored factors such as leadership (e.g. Amabile & Khaire, 2008; Amabile, Schatzel, Moneta, & Kramer, 2004; George & Zhou, 2007; Shin & Zhou, 2003; Stoker, Looise, Fisscher, & De Jong, 2001; Zhang & Bartol, 2010; Zhu, Avolio & Walumba 2009), job characteristics (e.g. complexity – Joo, 2007; task autonomy, feedback valence and style – Zhou, 1998; emotional and informational support at work – Madjar, 2008; evaluation and modeling – Shalley & Perry-Smith, 2001), group characteristics (Madjar, 2005; Hoegl, Weinkauf, & Gemuenden, 2004; Taggar, 2002), organizational culture (Joo, 2007; McLean, 2005; Wang, Guidice, Tansky, & Wang, 2010; Yoon, Song, Lim, & Joo, 2010), team identification (Hirst, Van Dick, & Van Knippenberg, 2009), social networks (Ohly, Kase, & Skerlavaj, 2010), organization structure (Becker & Baloff, 1969; Manimala, Jose, & Thomas, 2006; Pierce & Delbecq, 1977; Prakash & Gupta, 2008), and work environment (Amabile, Conti, Coon, Lazenby, & Herron, 1996; Lapierre & Giroux, 2003).

Surprisingly, the review of literature suggests that the impact of Human Resource Management (HRM) practices on employee creativity has received scant attention from both academics and practitioners. Though there have been studies that have tested the impact of specific practices on creativity (e.g. Baer, Oldham, & Cummings, 2003; Huang & Lin, 2006; Manimala et al., 2006; Manolopoulos, 2006; Ramamoorthy, Flood, Slattery, & Sardessai, 2005; Shalley & Perry-Smith, 2001), almost all the studies have considered only a few practices. Moreover, the studies have failed to provide a coherent validation of directionality of these relationships. For example, Baer et al. (2003) observed that 'Unfortunately, there is little agreement among scholars concerning the likely direction of the effects of such rewards on creativity' (p. 570). Also, these studies have

failed to provide a theory of how do these practices influence employee creativity. If we are to improve our understanding of the impact of HRM on creativity, we need a theory about HRM, a theory about creativity and a theory about how they are linked.

The present review begins by briefly reviewing the literature on HRM practices and identifies a set of HRM practices that have been found to significantly impact employee performance. Next, the study develops probable linkages between HRM practices and employee creativity. In doing so, we take support of the componential framework of creativity (Amabile, 1983) consisting of domain-relevant skills, creativity-relevant skills and task motivation. Research on workplace creativity faces a criterion problem. Although considered a unitary construct in most studies, creativity has been conceptualized and measured in terms of both behaviors and outcomes of these behaviors (Montag, Maertz, & Baer, 2012). Overall measures of creativity (e.g. Scott & Bruce, 1994; George & Zhou, 2001) have been used in creativity research so far without discriminating behaviors from outcomes. While engaging in creative behaviors is in an employee's control, the outcomes can be influenced by multiple environmental factors (Montag et al., 2012; Zhang & Bartol, 2010). The present study differentiates between creative behaviors from creative performance and develops a framework linking high-performance HRM practices to creative behaviors and to creative performance. The final explores the 'black-box' of how HRM practices affect employee creativity. Building on the ideas of positive psychology, the article presents positive psychological capital as a mediating variable for the HRM practicecreativity relationship. High-performance practices can enhance the positive exchange between the employee and employer, thereby enhancing employee creativity and innovative behaviors.

LITERATURE REVIEW AND PROPOSITION DEVELOPMENT

High Performance Work Practices

Research in the field of HRM has been guided by various approaches. The first of these approaches was Walton's (1985) High-Commitment Management. Walton based his HRM model on employee commitment and called for the combined usage of certain personnel practices, such as job redesign, job flexibility, problem-solving groups, team-based working and minimal status differences in order to keep the workforce sufficiently committed. The next approach that became popular was Lawler's (1986) High-Involvement Management. High-Involvement management was considered to be the less restrictive interpretation of high-commitment management (Wood, 1999) and focused on four principles - Power, Information, Knowledge and Rewards – for building an involved workforce. The most recent approach is called as High-Performance Management (Huselid, 1995; Appelbaum, Bailey, Berg, & Kalleberg, 2000). The argument behind high-performance management is that competitive markets now demand that 'firms emphasize quality and are able to adapt rapidly to changing conditions', which in turn means that they 'must increasingly rely upon the creativity, ingenuity and problem-solving ability of their workers' (Wood & Wall 2007, p. 1339). High performance organizations ensure that their employees are equipped to make devolved decision, have the necessary information, skills and incentives, and are responsible for decisions essential for innovation, improvement and rapid response to change. From here onwards, we use the umbrella term - high-performance management – to imply the important features of all the three approaches. Given below is a brief description of the high performance work practices that have been identified for the present study.

Empowerment forms the core of a high-performance work system is an organization that enables non-managerial employees to participate in substantive decisions. Empowerment, as a HRM practice, has found strong support in the literature and has been included in the set of high-performance practices by various researchers in western context (Arthur, 1994; Becker & Gerhart, 1996; Chand & Khatou, 2007; Fey, Björkman, & Pavlovskaya, 2000; Forth & Millward, 2004; Godard, 2001; Guthrie, Flood, Liu, & MacCurtain, 2009; Ichniowski, Shaw, & Prennushi, 1997; Paré & Tremblay, 2007; Pfeffer, 1998; Paul & Anantharaman, 2003; Schneider, 1988; White, Hill, Mcgovern, Mills, & Smeaton, 2003; Wood & Wall, 2007).

People work in a 'relationship-rich' environment that necessitates examining interdependent work and non-work relationships that contribute to one's growth (Ramaswami & Dreher, 2010). *Coaching and mentoring* is an important HRM practice that enhances the development of relationships at workplace. Mentoring is an exchange relationship between a mentor (a senior experienced individual) and a mentee (a less experienced individual) or the protégé. Coaching and mentoring has been found to be instrumental in achieving better performance of organizations (Cappelli, Singh, Singh, & Useem, 2010).

Information-sharing can help in enhancing employee motivation directly and also their sense of empowerment (Cappelli et al., 2010). Also, these practices might help to reduce the power differential that may exist in a society and undo the impact of being dominated and controlled for so long. Researchers have argued that information-sharing can lead to internalization of firm's goals and values by employees, can enhance feelings of mutual trust, and can make employees feel important to the company (Bartel, 2004; Björkman & Budhwar, 2007; Guthrie et al., 2009; Ichniowski & Shaw, 1999; Paré & Tremblay, 2007; Pfeffer, 1998).

Politics and power play are an integral part of any society (Sinha & Sinha, 1990). The relationships between boss and subordinate quite often degenerate into manipulation and ingratiation leading to simmering tensions on both sides. With the strong power differentials that exist amongst the two parties, the employees often feel helpless and resentful. Any talks of cooperation, obedience and loyalty in such a condition are impossible. Presence of *conflict resolution mechanisms* can be quite useful in such a context. Arthur (1992) calls these as 'due process', Huselid (1995) and Delaney and Huselid (1996) mention them as 'formal grievance procedures' and Wood and Wall (2007) call them as 'employee voice'. Cappelli et al. (2010) describe conflict resolution mechanisms as a means of empowering employees, whereby they can 'flag product-quality problems or even personal issues related to management'.

Need for recognition is a fundamental driver of human behavior. The practices of *merit-based promotion* and *performance-based pay* can be effective motivators of employee performance. Merit-based promotion refers to nonmonetary rewards (promotion, designation change etc), through which a firm tangibly signals its appreciation of quality work and achievements. Literature has found strong support for the relationship between both these practices and employee performance (Agarwal & Ferratt, 1999; Appelbaum et al., 2000; Bartel, 2004; Björkman & Budhwar, 2007; Chand & Khatou, 2007; Forth & Millward, 2004; Guerrero & Baraud-Didier, 2004; Guest, 1997; Guthrie, 2001; Guthrie et al., 2009; Huselid, 1995; Ichniowski & Shaw, 1999; Osterman, 2006; Paul & Anantharaman, 2003; Schneider, 1988).

Researchers in collective societies have discussed the role of *need for extension* (Pareek, 1968) and *need for social achievement* (Cappelli et al., 2010; Mehta, 1979) as possible motivators for the Indian workforce. Strong organizational missions can help employees find meaning in their work and motivate them by tapping into task significance (Cappelli et al., 2010). Developing a

strong mission and stitching HRM practices around these could be quite useful in enhancing employee performance.

Selection is one of the major tools for developing and promoting corporate culture (Schein, 2004) and can ensure that the candidates are carefully screened to "fit in" to the existing corporate culture (Nazir, 2005). Through *selective staffing*, organizations can ensure that they recruit the right set of individuals. Selective staffing practices emphasize knowledge and human relations skills (Godard, 2004) and lead to a more qualified and motivated workforce (Guest, 1997; Paul & Anantharaman, 2003), a positive work environment (Wright et al., 2003), and successful implementation of a business strategy (Sanz-Valle, Sabater-Sanchez, & Aragon-Sanchez, 1999).

Competency Development Practices refer to the training and development, performance appraisal and career management practices of the organization. Training is one of the ways of socialization through which an organization can motivate its employees and equip them with necessary skills required in accomplishing the organization missions (Schneifer, 1988; Cappelli et al., 2010). Performance appraisals help in measuring the performance of employees and provide them feedback which can then help in achieving better performance (Bartel, 2004). Career management programs assist employees in career planning. One important aim of career planning is to identify sequences of job assignments that help employees gain the skills and knowledge viewed as important in the company. A company career planning system may encourage employees to take more responsibility for their development. Such programs may also help ensure that employees possess the mix of skills that the firm believes are important for its future success. Career planning assistance, thus, has a positive effect on the level and type of skills and knowledge in the company (Fey et al., 2000).

Newcomer Socialization is another powerful mechanism of promoting corporate culture and achieving congruency between employee values and those espoused for by the organization. Newcomer socialization has been found to lead to enhanced role clarity, self-efficacy and social acceptance leading to enhanced job satisfaction, organizational commitment, job performance and reduced turnover intentions (Bauer, Bodner, Erdogan, Truxillo, & Tucker, 2007). Socialization programs can create an "esprit de corps," a shared experience, an interpersonal or informal network, a company language or jargon, as well as develop technical competencies (Schneider, 1988). Literature suggests strong support for selective staffing, competency development and socialization practices to be included in the set of high-performance HRM practices (e.g. Appelbaum et al., 2000; Arthur, 1994; Bartel, 2004; Björkman & Budhwar, 2007; Chand & Katou, 2007; Delaney & Huselid, 1996; Forth & Millward, 2004; Guest, 1997; Huselid, 1995; MacDuffie, 1995; Pfeffer, 1998; Paré & Tremblay, 2007; Paul & Anantharaman, 2003; Rodriguez & Ventura, 2003; Sanz-Valle et al., 1999; Wright et al., 2003).

With the business environment becoming more dynamic and unpredictable, team-based work and *flexible job designs* have become need of the hour. Flexible job designs can lead to work enrichment so that employees have high levels of discretion and decision-making powers by enhancing autonomy and formation of teams that have considerable autonomy following, for example, socio-technical design principles (Wood & Wall, 2007). Forth & Millward (2004) called these as *task practice* comprising of team working and functional flexibility while Godard (2001) called them as a component of Alternate Work Practices. Other researchers have also found support for flexible job design as a high-performance HRM practice (Arthur, 1992; MacDuffie, 1995; Guest, 1997; Paré & Tremblay, 2007; Paul & Anantharaman, 2003; Pfeffer, 1998; White et al., 2003).

Table 1 provides a listing of the HRM practices along with their definitions as implied in this study. The HRM practices mentioned here form an exhaustive set of HRM practices that we believe should be considered while designing the HRM bundle for any organization. We accept that the implementation of all these practices may be a costly proposition and the cost associated can offset the performance improvement achieved (Godard, 2004). Also, while some of these practices can cause certain undesired effects (e.g. low job satisfaction and self-esteem – Godard, 2001; job strain and lower pay satisfaction – Ramsay, Scholarios, & Harley, 2000; and negative spillovers – White et al., 2003), other HRM practices can help alleviate some of these negative effects (e.g. flexible job designs, empowerment, coaching & mentoring). It is important, therefore, for organizations to choose their set of complementary practices carefully in line with their business strategies. We call the above mentioned HRM practices as *high-performance HRM practices* (*HPWP*).

Table 1. List of High-Performance Work Practices Identified

HR Practice	Definition
Coaching & Mentoring	Providing coaching and helpful career advice, and doing things to facilitate a person's skill acquisition, professional development, and career advancement.
Empowerment	Providing employees substantial responsibility and discretion in carrying out work activities, handling problems, and making important decisions.
Information Sharing	Providing information on financial, performance, operational strategies.
Conflict Resolution Mechanisms	Flag product-quality problems or even personal issues related to management.
Merit Based Promotion; Performance Based Pay	Promotions based solely on merit. Pay and rewards linked to performance that is measured objectively
Social Missions	Creating strong missions that appeal to emotion or logic to generate enthusiasm for the work, task significance, commitment to task objectives, and compliance with requests for cooperation, assistance, support, or resources, and setting an example of appropriate behavior.
Selective Staffing	Stringent selection of individuals based on person-job fit
Socialization	Induction trainings, association with high-performing individuals
Competency Development (Training, Performance- Appraisal, Career	Need based training, exhaustive, accurate and extensive training needs identification; improvement oriented appraisals leading to identification of training needs, delinked from rewards; career planning linked to business plans, growth of employee in his

Management)	profession (technically and financially)
Flexible Job Designs	Job rotation, team-based working, participation in group activities (e.g. quality circles)

Employee Creativity

Solving problems creatively requires extensive and effortful cognitive processing (Reiter-Palmon & Illies, 2004). A critical area that has not received much research focus is the connection between engaging in the creative process itself and creative performance (Gilson, 2008). Although creativity literature (e.g. Amabile 1983, 1996) makes explicit acknowledgment of creative behaviors (e.g. problem or task presentation, preparation, response generation) much of the research relating to creativity has concentrated on contextual factors that influence creative performance and the creative behavior aspect has not received attention commensurate with its importance. Only when such a connection is delineated and explored empirically, will a more precise understanding of creativity emerge that shall help management in identifying individual, group and organizational practices that can actually aid in enhancing the competitive advantage of organizations.

Research on workplace creativity faces a criterion problem. Although considered a unitary construct in most studies, creativity has been conceptualized and measured in terms of both behaviors and outcomes of these behaviors (Scott & Bruce, 1994; Zhang & Bartol, 2010). As has been suggested by Montag et al. (2012) in their review of creativity of criterion space, in the present study we differentiate between creative performance behaviors from creative outcomes. While engagement in creative behaviors is within the control of an employee, the outcomes of these behaviors may depend on external factors like economy, market, location etc. Weak correlations found by researchers between subjective and objective creativity measures (e.g. Dewett, 2007; Gupta, 2013; Oldham & Cumming, 1996) further support the need for this

distinction. Notwithstanding the weak correlations, however, we believe that the engagement in creative performance behaviors is likely to be positively related to creative outcomes. Given below is a brief description of the creative performance behaviors included in the study.

Creative Performance Behaviors

Creative behaviors are related to either the generation or promotion of ideas or products (Janssen, 2000; Khazanchi & Masterson, 2011). Reiter-Palmon and Illies (2004) described problem identification, information search and idea generation as behaviors that culminate in generating innovative ideas to tackle a problem. Problem identification is the first step in the creativity process and deals with defining a problem. After a problem has been constructed, a large and diverse set of information must be gathered and integrated. Gathered information can provide exposure to others' ideas, facilitate cognitive stimulation and elicit feedback, all crucial for idea generation (Khazanchi & Masterson, 2011). The third stage involves making use of the existing knowledge in generating alternative solutions and then selecting the one that is most probable to achieve the set goal. Idea promotion behavior (referred to as 'mobilizing support' behavior in the present study) deals with employees persuading others to accept and recognize their ideas as creative (Janssen, 2000). Through idea promotion behavior, employees persuade others of the originality and usefulness of their ideas, resulting in the ideas being recognized and accepted as creative (Khazanchi & Masterson, 2011). Considering the importance of both idea generation and idea promotion behaviors, creative performance behaviors have been defined in the present study as behaviors comprising of problem identification, information search, idea generation and mobilizing support behaviors.

High Performance Work Practices and Creative Performance Behaviors

The componential framework of creativity (Amabile, 1983) includes three major components, domain-relevant skills, creativity-relevant skills, and task motivation. The component of domainrelevant skills includes factual knowledge (facts, principles, opinions, knowledge of paradigms), technical skills and special domain-relevant talents that may contribute to creative productivity. 'Domain-Relevant Skills' forms the basis for performance in any domain and they comprise the individual's complete set of response possibilities from which the new response is to be synthesized, and the information against which the new response is to be judged. 'Creativity-Relevant Skills' includes: (a) cognitive style characterized by ability to break perceptual set, to break cognitive set, to understand complexity, to break out of performance 'scripts' and seeing things differently; (b) knowledge of heuristics for generating novel ideas; and (c) creative work style characterized by ability to concentrate effort and attention for long period of time, persistence and high energy level. 'Task Motivation' implies an individual's perceptions of his/her reasons for undertaking the task in a given instance. Task motivation can be broadly classified into intrinsic motivation – a motivational state generated by the individual's reaction to intrinsic properties of the task; and extrinsic motivation – motivation generated due to the extrinsic factors (e.g. rewards, job title etc.) associated with the task.

Organizations set the tone of social exchange relationships by providing employees with a multitude of resources such as appreciation, prestige, growth, recognition, fairness, and empowerment through their HRM practices. In return, employees may expand their definitions of job responsibilities and be motivated to engage in more creative behaviors. Despite claims that innovative HRM practices can boost firm-level performance and national competitiveness, few

studies have been able to confirm this relationship empirically, and still fewer have systematically described the conditions under which it will be strongest (MacDuffie, 1995). Researchers have conceptualized that the HRM practices impact employee performance through 'a cognitive path' where an employee takes greater advantage of the skills and abilities and 'a motivational path' in which HRM practices increase employees' satisfaction and other affective reactions (Bates, Cox, Robertson-Smith, & Garrett, 2009; Batt, 2002; Gong & Chang, 2008; Vandenberg, Richardson, & Eastman, 1999). Extending this line of thinking, we develop arguments liking high performance HRM practices to employee creative behaviors.

Task Motivation

The mentoring relationships lead to development of interpersonal relationships between the bosses and the employees that are characterized by guidance, advice, counsel, feedback, and support (Eby, Rhodes, & Allen, 2007). Also, mentoring programs have been found to lead to better employee morale (Fletcher & Ragins, 2007), better career management, career and job satisfaction (Allen, Eby, Poteet, Lentz, & Lima, 2004), greater commitment and organizational attraction (Allen & O'Brien, 2006; Horvath, Wasko, & Bradley, 2008). *Empowerment* maximizes employee's involvement (Konrad, 2006) thereby fostering a greater sense of intrinsic motivation and positive work attitudes (Lawler, 1986). Providing employee voice in his work, authority to make decisions and control over his environment can enhance intrinsic motivation. *Conflict Resolution Mechanisms* may help alleviate situations of perceived injustice or conflicts in the company. Both the process of handling the complaint and the outcome of the process may influence employee perceptions of how the firm deals with the situation (Morrison & Robinson, 1997). Well-functioning conflict resolution mechanisms can help reduce their sense of helplessness in front of their bosses and can increase the probability that employee participation

efforts will be effective because they provide a well-defined way for employer-employee communication on work-related issues (Huselid, 1995). To the extent that a complaint is properly handled, the employee is more likely to maintain a high level of motivation (Fey et al., 2000).

Information sharing enables the sharing of information on financial, performance and operational strategies and conveys to employees that they are trusted (Pfeffer & Veiga, 1999), thereby leading to their increased involvement (Guerrero & Barraud-Didier, 2004). Selective staffing, socialization, extensive skills trainings, merit-based promotion, and performanceoriented appraisal signal an organization's intent to establish a long-term exchange relationship with its employees (Sun, Aryee, & Law, 2007). Also, these practices can significantly impact the discretionary behaviors by influencing employee motivation by entering into a social exchange relationship (Morrison, 1996). Merit-based promotions can strongly influence extrinsic motivation (Guest, 1997; Huselid, 1995; Manolopoulos, 2006; Paré & Tremblay, 2007) of employees. Though, extrinsic motivation has been said to be detrimental to creativity (Amabile, 1983), we feel that in a scarcity-ridden economies of countries today, extrinsic rewards (money and position) can be strong motivators of innovative behaviors, provided the outcomes of the such behaviors are tangibly and justly linked to incentives. Stringent selection practices influence the employee-job fit and the quality of the workforce which, in turn, influences the motivation of employees (Arthur, 1994; Godard, 2004; Guest, 1997; MacDuffie, 1995; Wright et al., 2003). Moreover, a selective organization conveys status and prestige to those being selected (Gong & Chang, 2008). Competency development practices enhance employee quality (Guest, 1997; Wright et al., 2003) and employee motivation (Gong & Chang, 2008; Huselid, 1995; Konrad, 2006; Paul & Anantharaman, 2003).

Performance-based compensation influences (extrinsic) motivation (Guest, 1997). Basing their arguments on Vroom's expectancy theory (1964), Fey et al. (2000) mention that if the company provides rewards desired by the employee in question, this employee is more likely to perform in a way that will bring him the reward. Paul and Anantharaman (2003) found that compensation practices positively affect commitment of skilled professional in Indian IT firms. Other researchers (Àngel & Sànchez, 2009; Arthur, 1994; Godard, 2004; Guerrero & Barraud-Didier, 2004; Guthrie, 2001; Konrad, 2006; MacDuffie, 1995; Wright et al., 2003) also suggest that contingent pay systems, especially pay-for-knowledge, group bonuses, and profit-sharing should lead to enhanced commitment of the employees. We, thus, posit:

P1: High-performance work practices (empowerment, coaching and mentoring, information-sharing, conflict resolution mechanisms, recognition, performance-based pay, selective staffing, socialization, competency development, flexible job design, and strong social mission) are positively related to employee task motivation (intrinsic motivation, extrinsic motivation).

Domain- and Creativity-Relevant Skills

Empowerment and participatory systems enable employees to understand the firm's competitive position and enable them to work towards improving their firm's position (Wright et al., 2003). Information sharing enables the sharing of information on financial, performance and operational strategies (Pfeffer & Veiga, 1999), which influences employee perceptions about role structures (Guest, 1997) and enables them to participate better (Wright et al., 2003). A good communication system provides employees with data that is timely and relevant to their particular work process, thereby influencing them personally to either expend or withhold effort (Konrad, 2006). Mentors provide access to social networks that include repositories of knowledge not available through formal communication channels (Dreher & Ash, 1990). Entry

into these social networks provides the protégé with the opportunity to display talent and skills to decision makers within the organization (Allen et al., 2004). Mentors can also have a significant influence on an employee's cognitive and work styles (i.e. creativity-relevant skills) through role modeling, evaluation and mastery experiences (Shalley & Perry-Smith, 2001). Flexible job designs improve knowledge of employees and allow them to see the company from number of perspectives (Àngel & Sànchez, 2009; Farh, Podsakoff, & Organ, 1990). This enhanced exposure to the working of the organization can significantly enhance their domain-relevant skills that are essential for creativity.

Selective staffing can be used to try and select employees who are more likely to be creative or who have higher innate creative ability (Guest, 1997; Shalley & Gilson, 2004). Organizations can focus on screening prior to selection to try to hire employees based on their task expertise and cognitive skills needed for creativity. *Training* can be used to provide educational opportunities that can enhance task domain expertise. By offering training opportunities that can increase individuals' knowledge base or their creativity relevant skills, this should help employees to try to be more creative in their work (Shalley & Gilson, 2004). Basudur, Graen, and Green (1982), through an empirical study, demonstrated that training in creative thought processes can result in positive improvements to attitudes associated with divergent thinking. Research on training for creative problem solving has indicated that training can help enhance employees' level of creativity (e.g., Basudur, Wakabayashi, & Graen, 1990). Effective performance-based appraisal can help in identifying the training needs and thus aid in improving the domain and creativity relevant skills.

Socialization with highly creative people can train employees in creativity related skills (Guest, 1997; Shalley & Perry-Smith, 2001). Good socialization can make employees believe in

organizational missions and can create creative mindsets. Socialization programs can create an 'esprit de corps,' a shared experience, an interpersonal or informal network, a company language or jargon, as well as develop technical competencies (Schneider, 1988). Flexible job design and team-based working can lead to work enrichment and an opportunity to learn from other team members thereby contributing to better domain and creativity relevant skills. Based on above arguments, we posit:

P2: High Performance Work Practices (empowerment, coaching and mentoring, information-sharing, conflict resolution mechanisms, recognition, performance-based pay, selective staffing, socialization, competency development, flexible job design, and strong social mission) are positively related to employee domain-relevant skills.

P3: High Performance Work Practices (empowerment, coaching and mentoring, information-sharing, conflict resolution mechanisms, recognition, performance-based pay, selective staffing, socialization, competency development, flexible job design, and strong social mission) are positively related to employee creativity-relevant skills.

Basing our arguments on the componential theory of creativity (Amabile, 1983, 1997), we posit: P4: Employee task motivation (intrinsic motivation, extrinsic motivation) is positively related to creative performance behaviors (problem identification, information search, idea generation, and idea promotion).

P5: Employee domain-relevant skills are positively related to creative performance behaviors (problem identification, information search, idea generation, and idea promotion).

P6: Employee creativity-relevant skills are positively related to creative performance behaviors (problem identification, information search, idea generation, and idea promotion).

Positive Psychological Capital

During the late 1990s, positive psychology emerged with a renewed emphasis on what is right with people, rather than the almost total preoccupation psychology has had over the years with what is wrong with people (Larson & Luthans, 2006; Seligman & Csikszentmihalyi, 2000; Snyder & Lopez, 2002). The composite construct of PsyCap has been defined as "an individual's positive psychological state of development characterized by: (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success" (Luthans, Youssef, & Avolio, 2007, p. 3).

As organizations seek ways to help employees navigate the ever-challenging work environment, they increasingly are recognizing the importance of positivity and concentrating on developing employee strengths, rather than dwelling on the negative and trying to fix employee vulnerabilities and weaknesses. In this respect, we believe Positive Psychology (and in particular PsyCap) has a great potential for influencing the efficiency and performance of the human resource of an organization and it is important to refine, test and extend this newly formed construct for to HRM and creativity studies. Below, we develop arguments linking high-performance work practices to employee creative behavior, with psychological capital as an intervening variable.

HPWP and PsyCap

The four positive psychological capacities of confidence, hope, optimism, and resilience are measurable, open to development, and can be managed through focused interventions for more

effective work performance (Luthans, Luthans, & Luthans, 2004; Caza, McCarter, Hargrove, & Wad, 2009) and, therefore, being able to train and develop a positive approach to OB for leaders/managers and their people is critical to this approach (Luthans, 2002). HPWP enhance positive exchanges between the employee and the employer. These exchanges are positively related to employees' feelings of perceived organizational support and can enhance their PsyCap. Including employees in the goal-setting processes can lead to high-hope employees (Lopez, 2007). Thus, empowerment and firm's performance appraisal philosophy can significantly influence hope of its employees. Selective staffing practices that select employees based on their levels of positive psychological capacities are more likely to develop a workforce high on Psychological Capital (Caza et al., 2009). High-performance work practices signal to the employees that the organization views them as a strategic resource, invests in their development, recognizes their contribution, and cares for their well-being (Chuang & Liao, 2010). This can help in creating a positive unit-level climate where employees start to feel hopeful about their future, optimistic about their careers, resilient and efficacious about their potential and their ability to do well in their jobs (James, Choi, Ko, McNeil, Minton, Wright, & Kim, 2008). These HRM practices that focus on employee well-being (e.g. empowerment, coaching and mentoring, competency development, merit-based promotions, information-sharing) create an environment conducive for the development of psychological capital and can foster positive employee attitudes and behaviors in the workplace (Muse, Harris, Giles, & Field, 2008).

Self-efficacy can be enhanced through empowerment, communication (sharing useful information and positive feedback), training aimed at enhancing mastery experiences, vicarious positive experiences, positively oriented persuasion, physiological and psychological arousal. Teamwork and use of flexible job designs provide more responsibility, challenge, and

empowered personal control over the work thereby enhancing employee's self-efficacy (Luthans, 2002). Optimism has been shown to be amenable to development through Schneider's (2001) three-step process, which include leniency for the past, appreciation for the present, and opportunity seeing for the future. Coaching & mentoring, information-sharing, empowerment, training and development and socialization practices can be useful in developing optimism. Resilience can be enhanced using positive emotions, altering the perceived level of risk or personal assets (through coaching & mentoring), and generally fostering self-enhancement and development (through competency development practices) (Avey, Luthans, & Jensen, 2009). Hope can be enhanced by focusing on goal design acceptance and commitment (possible through empowerment), pathways generation (possible through information-sharing, mentoring and empowerment), developing alternate pathways and skill of regoaling (possible training interventions) and overcoming obstacles (possible through coaching and mentoring) (Luthans, 2002; Luthans, Avey, Avolio, Norman, & Combs, 2006). Luthans, Avey and Patera (2008) found that Psychological Capital can be developed through training interventions. They observed that 'the results of this experimental study provide at least initial support that the psychological capital of a broad cross-section of organizational participants can be developed through a short web-based training intervention' (p. 217). Based on the above arguments, we posit: P7: High Performance Work Practices (empowerment, coaching and mentoring, informationsharing, conflict resolution mechanisms, recognition, performance-based pay, selective staffing, socialization, competency development, flexible job design, and strong social mission) are

positively related to employee psychological capital (hope, optimism, resilience, self-efficacy).

Psychological Capital and Creative Performance Behaviors

Psychological Capital provides us with a new human resource development approach to help employees build the critical resources they need in today's stress-filled work-place (Avey et al., 2009). The delineation of human (what I know), social (who I know), and psychological capital (who I am and what I can become) and introducing coherent effort to develop them enables organizations to make best use of its human resources. The influence of Psychological Capital on Creativity has not been explored in the literature and there is sparse research to draw from either the Psychological Capital or the Creativity literatures. Out of the self-efficacy, hope, optimism and resilience, only self-efficacy has been tested as an antecedent of creativity (e.g. Gong et al., 2009; Tierney & Farmer, 2002). To build our arguments, we pull from the associated literatures surrounding each of the psychological capacities and inform the development of propositions. Resilient individuals have a firm acceptance of reality, a deep belief, often buttressed by strongly held values, that life is meaningful, and an astounding ability to improvise and adapt to significant change (Avey, Patera & West, 2006). Also, resilience is characterized by a staunch view of reality (Coutu, 2002), promotes emotional stability (Masten & Reed, 2002) and provides positive coping difficult life situation (Fredrickson, Tugade, Waugh, & Larkin, 2003). Optimistic individuals expect good things to happen to them leading to significant cognitive and behavioral implications (Carver & Scheier, 2003; Avey et al., 2006). Specifically, an optimistic employee may be more liable to indulge in behaviors that may aid in creative performance. Given the external attribution of negative events, when faced with negative outcomes optimists are likely to attribute the failure to external causes or to individuals around him, thereby avoiding reduction in the effort.

Self-efficacy is defined as the individual's conviction (or confidence) about his or her abilities to mobilize motivation, cognitive resources or courses of action needed to successfully execute a specific task within a given context and is characterized by extra effort and tenacious perseverance in accomplishing a given task (Avey et al., 2006; Bandura, 1997). Individuals that are generally high in self-efficacy tend to believe that they have the ability to deal with situations presented to them to arrive at success. As a result, these individuals are likely to view potential work hindrances as surmountable and challenges that are achievable rather than as disproportionately difficult. When faced with obstacles, such employees tend to react in a more productive manner, pooling resources, indulging in team work, helping others and seeking help, creating action plans, thinking about the impact of his actions on others, etc., rather than focusing most of their attention on the existence and nature of the problem/circumstances at hand. As a result, efficacious individuals may be more likely to display (and continue to display) intrinsic motivation (Gong et al., 2009; Tierney & Farmer, 2002) even when faced with difficult situations.

Finally, individuals with higher levels of *hope* have the agentic capacity to set and pursue goals in such a way that they stay motivated throughout the pursuant process (Luthans et al., 2007). Hopeful individuals are more likely to have established functional goals, providing them with directed motivation to work towards said goals on a daily basis (Snyder, 2002). Such individuals enjoy interacting with people and readily adapt to new and collaborative relationships; are less anxious, especially in evaluative, stressful situations; and are more adaptive to environmental change (Luthans, 2002). Hopeful people deal with everyday obstacles with great ease and may even become energized when they hit a sticky patch and then get unstuck. For them, failure of

one project does not lead to overall failure and reduction in display of behaviors beneficial for creativity. Based on the above arguments, we posit:

P8: Employee Psychological Capital (hope, optimism, resilience and self-efficacy) is positively related to employee creative performance behaviors (problem identification, information search, idea generation, idea promotion).

P9: Employee psychological capital (hope, optimism, resilience and self-efficacy) mediates the relationship between high-performance work practices (empowerment, coaching and mentoring, information-sharing, conflict resolution mechanisms, recognition, performance-based pay, selective staffing, socialization, competency development, flexible job design, and strong social mission) and employee creative performance behaviors (problem identification, information search, idea generation, idea promotion).

As has been argued above, engagement in creative behaviors is likely to lead to more creative performance (Reiter-Palmon & Illies, 2004; Shalley et al., 2004; Zhang & Bartol, 2010). We, thus, posit:

P10: Creative performance behaviors (problem identification, information search, idea generation, idea promotion) are positively related to employee creative performance.

Figure 1 below presents the conceptualized model.

P9: MEDIATES **PSYCHOLOGICAL** P7 P8 CAPITAL (Self-efficacy, Hope, Optimism, Resilience) HIGH PERFORMANCE TASK WORK PRACTICES P4 P1 CREATIVE **MOTIVATION** (Coaching & mentoring, PERFORMANCE empowerment, information sharing, conflict resolution **BEHAVIORS CREATIVE** DOMAIN-P2 P10 P5 mechanisms, merit-based (Problem Identification, **RELEVANT SKILLS PERFORMANCE** promotions, performance-Information Search, based compensation, selective Idea Generation, P6 **CREATIVITY-**P3 staffing, newcomer Idea Promotion) **RELEVANT SKILLS** socialization, competency development, flexible job design, social missions)

Figure 1. Conceptual Model

CONCLUSION

The present study makes multiple contributions to the HRM and Creativity literatures. Based on an exhaustive state-of-the-art literature review, we identify a set of high-performance HRM practices. Next, the article proposes a theoretical framework that establishes linkages between HRM practices and employee creativity. Creativity construct has been conceptualized to be comprising of creative performance behaviors and creative performance. The study develops arguments delineating the impact of HRM practices on employees' creative behaviors and eventually their creative performance. Finally, the study builds on the concepts of positive psychology and presents psychological capital as an important mediating variable for the relationship between high-performance HRM practices and employee creativity. To our best knowledge, such a study is first of its kind and the conceptualized model, when tested, can provide a number of insights for managers and researchers alike. Future work should concentrate on hypotheses generation from the propositions presented here and their empirical testing. We hope that the ideas presented here will provide seeds for future research.

REFERENCES

Agarwal, R., & Ferratt, T. W. (1999). Coping with labor scarcity in IT: Strategies and practices for effective recruitment and retention. Cincinnati, OH: Pinnaflex.

Allen, T. D., Eby, L. T., Poteet, M. L., Lentz, E., & Lima, L. (2004). Career benefits associated with mentoring for protégés: A meta-analysis. *Journal of Applied Psychology*, 89(1), 127–136.

Allen, T. D., & O'Brien, K. E. (2006). Formal mentoring programs and organizational attraction. *Human Resource Development Quarterly*, 17(1), 43-58.

Amabile, T. M. (1983). The social psychology of creativity. New York: Springer-Verlag.

Amabile, T. M. (1996). *Creativity in Context*. Boulder, CO: Westview Press.

Amabile, T. M. (1997). Motivating creativity in organizations. *California Management Review*, 40(1), 39-58.

Amabile, T.A., Barsade, S.G., Mueller, J.S. & Staw, B.M. (2005). Affect and creativity at work. *Administrative Science Quarterly*, *50*, 367-403.

Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal*, 39(5), 1154–1184.

Amabile, T. M., & Khaire, M. (2008). Creativity and the role of the leader. *Harvard Business Review*, 86(10), 100-109.

Amabile, T. M., Schatzel, E. A., Moneta, G. B. & Kramer, S. J. (2004). Leader behaviors and the work environment for creativity: Perceived leader support. *Leadership Quarterly*, 15, 5-32.

Àngel, P. O. & Sànchez, L. S. (2009). R&D managers' adaptation of firms' HRM practices. *R&D Management*, 39(3), 271-290.

Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. L. (2000). *Manufacturing advantage:* Why high-performance work systems pay off. Ithaca, New York: Cornell University Press.

Arthur, J. B. (1992). The link between business strategy and industrial relations systems in American steel minimills. *Industrial and Labour Relations Review*, 45, 488-506.

Arthur, J. B. (1994). Effects of human resource systems on manufacturing performance and turnover. *Academy of Management Journal*, *37*(4), 670–687.

Avey, J. B., Luthans, F., & Jensen, S. M. (2009). Psychological capital: A positive resource for combating employee stress and turnover. *Human Resource Management*, 48(5), 677-693.

Avey, J. B., Patera, J. L., & West, B. J. (2006). The implications of positive psychological capital on employee absenteeism. *Journal of Leadership & Organizational Studies*, 13(2), 42-60.

Baer, M., Oldham, G. R. & Cummings, A. (2003). Rewarding creativity: When does it really matter? Leadership Quarterly, 14, 569-586.

Bandura, A. (1997). Self-efficacy: The Exercise of Control. New York: Freeman

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99-120.

Bartel, A. P. (2004). Human resource management and organizational performance: Evidence from retail banking. *Industrial and Labor Relations Review*, *57*(2), 181-203.

Basudur, M., Graen, G. B., & Green, S. G. (1982). Training in creative problem solving: Effects of ideation and problem finding and solving in an industrial research organization. *Organizational Behavior and Human Performance*, 30, 41–70.

Basudur, M., Wakabayashi, M., & Graen, G. B. (1990). Individual problem-solving styles and attitudes toward divergent thinking before and after training. *Creativity Research Journal*, *3*, 22–32.

Bates, P., Cox, A., Robertson-Smith, G., & Garrett, R. (2009). *High Performance Working: Developing a Survey Tool.* London, UK.

Batt, R. (2002). Managing customer services: Human resource practices, quit rates, and sales growth. *Academy of Management Journal*, 45, 587–597.

- Bauer, T. N., Bodner, T., Erdogan, B., Truxillo, D. M. & Tucker, J. S. (2007). Newcomer adjustment during organizational socialization: A meta-analytic review of antecedents, outcomes, and methods. *Journal of Applied Psychology*, 92(3), 707-721.
- Becker, B. E. & Gerhart, B. (1996). The impact of human resource management on organizational performance: progress and prospects. *Academy of Management Journal*, 39(4), 779–801.
- Becker, S. W. & Baloff, N. (1969). Organization structure and complex problem solving. *Administrative Science Quarterly*, 14(2), 260-271.
- Björkman, I., & Budhwar, P. (2007). When in Rome...? Human resource management and the performance of foreign firms operating in India. *Employee Relations*, 29(6), 595-610.
- Cappelli, P., Singh, H., Singh, J. V. & Useem, M. (2010). Leadership lessons from India: How the best Indian companies drive performance by investing in people. *Harvard Business Review*, 88(3), 90-97.
- Carver C. S. & Scheier M. F. (2005). Optimism. In C. R. Snyder, & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 231-243). Oxford: Oxford University Press.
- Caza, A., McCarter, M. W., Hargrove, D., & Wad, S. R. (2009). Third party effects of Psychological Capital: Observer attributions and responses. *Academy of Management Proceedings*, 1-6.
- Chand, M., & Katou, A. A. (2007). The impact of HRM practices on organisational performance in the Indian hotel industry. *Employee Relations*, 29(6), 576-594.
- Chong, E. & Ma, X. (2010). The influence of individual factors, supervision and work environment on creative self-efficacy. *Creativity and Innovation Management*, 19(3), 233-247.
- Chuang, C., & Liao, H. (2010). Strategic human resource management in service context: Taking care of business by taking care of employees and customers. *Personnel Psychology*, 63(1), 153-196.
- Coutu, D. L. (2002). How resilience works. *Harvard Business Review*, 80(5), 46–55.
- Delaney, J. T. & Huselid, M. A. (1996). The impact of human resource management practices on perceptions of organizational performance. *Academy of Management Journal*, 39(4), 949–969.
- Dellas, M. & Gaier, E. L. (1970). Identification of creativity: The individual. *Psychological Bulletin*, 73(1), 55-73.
- Dewett, Todd (2007). Linking intrinsic motivation, risk taking, and employee creativity in an R&D environment. *R&D Management*, *37*(3), 197-208.

Dreher, G. F., & Ash, R. A. (1990). A comparative study of mentoring among men and women in managerial, professional, and technical positions. *Journal of Applied Psychology*, 75, 539–546.

- Eby, L. T., Rhodes, J., & Allen, T. D. (2007). Definition and evolution of mentoring. In T. D. Allen & L. Eby (Eds.), *The Blackwell handbook of mentoring: A multiple perspectives approach* (pp. 7–20). Malden, MA: Blackwell.
- Farh, J. L., Podsakoff, P., & Organ, D. W. (1990). Accounting for organisational citizenship behavior: Leader fairness and task scope versus satisfaction. *Journal of Management*, 16(4), 705-21.
- Feist, G. J. (1998). A meta-analysis of personality in scientific and artistic creativity. *Personality and Social Psychology Review, 4,* 290-309.
- Fey, C. F., Björkman, I. & Pavlovskaya, A. (2000). The effect of human resource practices on firm performance in Russia. *International Journal of Human Resource Management*, 11(1), 1-18.
- Fletcher, J. K., & Ragins, B. R. (2007). Stone center relational cultural theory: A window on relational mentoring. In B. R. Ragins & K. E. Kram (Eds.), *The Handbook of Mentoring at Work: Theory, Research and Practice* (pp. 373–399). Thousand Oaks, CA: Sage.
- Forth, J., & Millward, N. (2004). High-involvement management and pay in Britain. *Industrial Relations*, 43(1), 98-119.
- Fredrickson B. L., Tugade M. M., Waugh C. E., & Larkin, G. (2003). What good are positive emotions in crises? *Journal of Personality and Social Psychology*, 84, 365–376.
- George, J. M., & Zhou, J. (2001). When openness to experience and conscientiousness are related to creative behavior: An interactional approach. *Journal of Applied Psychology*, 86(3), 513-524.
- George, J. M., & Zhou, J. (2007). Dual tuning in a supportive context: Join contributions of positive mood, negative mood, and supervisory behaviors to employee creativity. *Academy of Management Journal*, 50(3), 605-622.
- Gilson, L. L. (2008). Why be creative: A review of the practical outcomes associated with creativity at the individual, group, and organizational levels. In J. Zhou & C. E. Shalley (Eds.), *Handbook of Organizational Creativity* (pp. 303-322). New York, NY: Erlbaum.
- Godard, J. (2001). High performance and the transformation of work? The implications of alternative work practices for the experience and outcomes of work. *Industrial and Labor Relations Review*, 54(4), 776-805.
- Godard, J. (2004). A critical assessment of the high-performance paradigm. *British Journal of Industrial Relations*, 42(2), 349-378.
- Gong, Y., & Chang, S. (2008). How do high performance work systems (HPWS) affect collective organizational citizenship behavior (OCB)? A collective social exchange perspective. *Academy of Management Proceedings*, 1-7.

Gong, Y., Huang, J.-C., Farh, J.-L. (2009). Employee learning orientation, transformational leadership, and employee creativity: The mediating role of employee creative self-efficacy. *Academy of Management Journal*, 52(4), 765-778.

- Guerrero, S. & Barraud-Didier, V. (2004). High-involvement practices and performance of French firms. *The International Journal of Human Resource Management*, 15(8), 1408-1423.
- Guest, D. (1997). Human resource management and performance: a review and research agenda. *International Human Resource Management*, 8(3), 263–276.
- Gupta, V. (2013). Linking Leadership to Employee Creativity through Work Motivation, Psychological Capital and Organizational Justice: A Study of Indian R&D Professionals. Unpublished Doctoral Dissertation.
- Guthrie, J. P. (2001). High involvement work practices, turnover and productivity: Evidence from New Zealand. *Academy of Management Journal*, 44(1), 180-190.
- Guthrie, J. P., Flood, P. C., Liu, W., & MacCurtain, S. (2009). High performance work systems in Ireland: human resource and organizational outcomes. *The International Journal of Human Resource Management*, 20(1), 112-125.
- Harackiewicz, J. M., & Andrew J. E. (1993). Achievement goals and intrinsic motivation. *Journal of Personality and Social Psychology*, 65(5), 904-915.
- Hirst, G., Van Dick, R., & Van Knippenberg, D. (2009). A social identity perspective on leadership and employee creativity. *Journal of Organizational Behavior*, *30*, 963-982.
- Hoegl, M., Weinkauf, K. & Gemuenden, H. G. (2004). Interteam coordination, project commitment, and teamwork in multi-team R&D projects: A longitudinal study. *Organization Science*, 15(1), 38-55.
- Horvath, M., Wasko, L. E., & Bradley, J. L. (2008). The effect of formal mentoring program characteristics on organizational attraction. *Human Resource Development Quarterly*, 19(4), 323-349.
- Huang, E. Y. & Lin, S.-C. (2006). How R&D management practice affects innovation performance. *Industrial Management & Data Systems*, 106(7), 966-996.
- Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38(3), 635–672.
- Ichniowski, C., & Shaw, K. (1999). The effects of human resource management systems on economic performance: An international comparison of U.S. and Japanese plants. *Management Science*, 45(5), 704-721.
- Ichniowski, C., Shaw, K. & Prennushi, G. (1997). The effects of human resource management practices on productivity. *American Economic Review*, 87(3), 291–313.
- James L. R., Choi C. C., Ko C. E., McNeil P. K., Minton M. K., Wright M. A., & Kim K. (2008). Organizational and psychological climate: A review of theory and research. *European Journal of Work and Organizational Psychology, 17*, 5–32.

Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, 73, 287-302.

Joo, B.-K. (2007). The Impact of Contextual and Personal Characteristics on Employee Creativity in Korean Firms. Unpublished Doctoral Dissertation.

Khazanchi, S., & Masterson, S. S. (2011). Who and what is fair matters: A multi-foci social exchange model of creativity. *Journal of Organizational Behavior*, *32*, 86-106.

Konrad, A. E. (2006). Engaging employees through high-involvement work practices. *Ivey Business Journal, March/April*, 1-6.

Lapierre, J. & Giroux, V.-P. (2003). Creativity and work environment in a high-tech context. *Creativity and Innovation Management*, *12*(1), 11-23.

Larson, M., & Luthans, F. (2006). Potential added value of psychological capital in predicting work attitudes. *Journal of Leadership & Organizational Studies*, 13(2), 75-92.

Lawler, E. E. (1986). High-Involvement Management. San Francisco: Jossey-Bass.

Lopez, S. (2007). The business case for instilling hope. *Gallup Management Journal*, *February* 1-6.

Luthans, F. (2002). Positive organizational behavior: Developing and managing psychological strengths. *Academy of Management Executive*, 16(1), 57-72.

Luthans, F., Avey, J. B., Avolio, B. J., Norman, S. M., & Combs, G. M. (2006). Psychological capital development: Towards a micro-intervention. *Journal of Organizational Behaviour*, *27*, 387-393.

Luthans, F., Avey, J. B., & Patera, J. L. (2008). Experimental analysis of a web-based training intervention to develop positive psychological capital. *Academy of Management Learning & Education*, 7(2), 209-221.

Luthans, F., Luthans, K. W., & Luthans, B. C. (2004). Positive psychological capital: Going beyond human and social capital. *Business Horizons*, 47(1), 45-50.

Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological Capital: Developing the Human Competitive Edge*. New York: Oxford University Press.

MacDuffie J. P. (1995). Human resource bundles and manufacturing performance: Organizational logic and flexible production systems in the world auto industry. *Industrial and Labor Relations Review*, 48(2), 197–221.

Madjar, N. (2005). The contributions of different groups of individuals to employees' creativity. *Advances in Developing Human Resources*, 7(2), 182-206.

Madjar, N. (2008). Emotional and informational support from different sources and employee creativity. *Journal of Occupational and Organizational Psychology*, 81, 83-100.

Madjar, N., Oldham, G. R., & Pratt, M. G. (2002). There's no place like home? The contributions of work and nonwork creativity support to employees' creative performance. *Academy of Management Journal*, 45, 757–767.

Manimala, M. J., Jose, P. D. & Thomas, K. R. (2006). Organizational constraints on innovation and intrapreneurship: Insights from public sector. *Vikalpa*, *31*(1), 49-60.

Manolopoulos, D. (2006). What motivates R&D professionals? Evidence from decentralized laboratories in Greece. *The International Journal of Human Resource Management*, 17(4), 616-647.

Masten, A. S., & Reed, M. G. J. (2005). Resilience in development. In C. R. Snyder & S. Lopez (Eds.), *Handbook of positive psychology* (pp. 74–88). Oxford: Oxford University Press.

McLean, L. D. (2005). Organizational culture's influence on creativity and innovation: A review of the literature and implications for human resource development. *Advances in Developing Human Resources*, 7(2), 226-246.

Mehta, P. (1979). *Analyzing stories for motivational profile: A manual*. New Delhi: National Labour Institute.

Montag, T., Maertz, C. P., Jr., & Baer, M. (2012). A critical analysis of the workplace creativity criterion space. *Journal of Management*, 38, 1362-1386.

Morrison, E. W. (1996). Organizational citizenship behavior as a critical link between HRM practices and service quality. *Human Resource Management*, *35*, 493-512.

Morrison, E. W., & Robinson, S. L. (1997). When employees feel betrayed: A model of how psychological contract violations develop. *Academy of Management Review*, 22, 226-56.

Muse, L., Harris, S. G., Giles, W. F., & Feild, H. S. (2008). Work-life benefits and positive organizational behavior: Is there a connection? *Journal of Organizational Behavior*, 29, 171-192.

Nazir, N. A. (2005). Person-culture fit and employee commitment in banks. *Vikalpa*, 30(3): 39-52.

Ohly, S., Kase, R. & Skerlavaj, M. (2010). Networks for generating and for validating ideas: The social side of creativity. *Innovation: Management, Policy & Practice, 12*(1), 41-52.

Oldham, G. R. & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *Academy of Management Journal*, *39*, 607-634.

Osterman, P. (2006). The wage effects of high performance work organizations in Manufacturing. *Industrial and Labor Relations Review*, 59(2), 187-203.

Paré, G., & Tremblay, M. (2007). The influence of high-involvement human resources practices, procedural justice, organizational commitment, and citizenship behaviors on information technology professionals' turnover intentions. *Group & Organization Management*, 32(3), 326-357.

Pareek, U. (1968). A motivational paradigm for development. *Journal of Social Issues*, 24, 115-122.

Paul, A. K., & Anantharaman, R. N. (2004). Influence of HRM practices on organizational commitment: A study among software professionals in India. *Human Resource Development Quarterly*, 15(1), 77-88.

Pfeffer, J. (1998). *The human equation: Building profits by putting people first*. Boston: Harvard Business School Press.

Pfeffer, J., & Veiga, F. (1999). Putting people first for organizational success. *Academy of Management Executive*, 13(2), 37-48.

Pierce, J. L. & Delbecq, A. L. (1977). Organization structure, individual attitudes and innovation. *Academy of Management Review*, 2(1), 27-37.

Prakash, Y. & Gupta, M. (2008). Exploring the relationship between organisation structure and perceived innovation in the manufacturing sector of India. *Singpore Management Review*, 30(1), 55-76.

Ramamoorthy, N., Flood, P. C., Slattery, T. & Sardessai, R. (2005). Determinants of innovative work behaviour: Development and test of an integrated model. *Creativity and Innovation Management*, 14(2), 142-150.

Ramaswami, A., & Dreher, G. F. (2010). Dynamics of mentoring relationships in India: A qualitative, exploratory study. *Human Resource Management*, 49, 501-530.

Ramsay, H., Scholarios, D., & Harley, B. (2000). Employees and high-performance work systems: Testing inside the black box. *British Journal of Industrial Relations*, 38(4), 501-531.

Reiter-Palmon, R. & Illies, J. J. (2004). Leadership and creativity: Understanding leadership from a creative problem-solving perspective. *Leadership Quarterly*, *15*, 55-77.

Rodriguez, J. M. & Ventura, J. (2003). Human resource management systems and organizational performance: An analysis of the Spanish manufacturing industry. *International Journal of Human Resource Management*, 14(7), 1206-1226.

Sanz-Valle, R., Sabater-Sanchez, R. & Aragon-Sanchez, A. (1999). Human resource management and business strategy links: An empirical study. *International Journal of Human Resource Management*, 10(4), 655-671.

Schein, E. H. (2004). *Organizational culture and leadership (3rd ed.)*. San Francisco, CA: Jossey-Bass.

Schneider, S. C. (1988). National vs. corporate culture: Implications for human resource management. *Human Resource Management*, 27(2), 231-246.

Scott, S. G. & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal*, *37*(3), 580-607.

Seligman, M. E. P. & Csikszentmihalyi, M. (2000). Positive psychology. *American Psychologist*, 55(1), 5–14.

Shalley, C. E., & Gilson, L. L. (2004). What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. *The Leadership Quarterly*, 15, 33-53.

- Shalley, C. E., Gilson, L. L., & Blum, T. C. (2000). Matching creativity requirements and the work environment: Effects on satisfaction and intent to turnover. *Academy of Management Journal*, 43, 215–224.
- Shalley, C. E. & Perry-Smith, J. E. (2001). Effects of social-psychological factors on creative performance: The role of informational and controlling expected evaluation and modeling experience. *Organizational Behaviors and Human Decision Processes*, 84(1), 1-22.
- Shalley, C. E., Zhou, J., & Oldman, G. R. (2004). The effects of personal and contextual characteristics on creativity: Where should we go from here? *Journal of Management, 30*, 933–958.
- Shin, S. J. & Zhou, J. (2003). Transformational leadership, conservation, and creativity: Evidence from Korea. *Academy of Management Journal*, 46(6), 703-714.
- Sinha, J. B. P., & Sinha, D. (1990). Role of social values in Indian organizations. *International Journal of Psychology*, 25, 705-714.
- Snyder C. R. (2002). Hope theory: Rainbows in the mind. *Psychological Inquiry*, 13(4), 249-276.
- Snyder, C. R., & Lopez, S. (2005). *Handbook of Positive Psychology*. Oxford: Oxford University Press.
- Stoker, J. I., Looise, J. C, Fisscher, O. A. M., de Jong, R. D. (2001). Leadership and innovation: Relations between leadership, individual characteristics and the functioning of R&D teams. *International Journal of Human Resource Management*, 12(7), 1141-1151.
- Sun, L., Aryee, S., & Law, K. S. (2007). High-performance human resource practices, citizenship behavior, and organizational performance: A relational perspective. *Academy of Management Journal*, 50(3), 558-577.
- Taggar, S. (2002). Individual creativity and group ability to utilize individual creative resources: A multilevel model. *Academy of Management Journal*, 45(2), 315-330.
- Tierney, P. & Farmer, S. M. (2002). Creative self-efficacy: Its potential antecedents and relationship to creative performance. *Academy of Management Journal*, 45(6), 1137-1148.
- Tierney, P., Farmer, S. M. & Graen, G. B. (1999). An examination of leadership and employee creativity: The relevance of traits and relationships. *Personnel Psychology*, *52*, 591-619.
- Vandenberg, R. J., Richardson, H. A., & Eastmann, L. J. (1999). The impact of high involvement work processes on organizational effectiveness: A second-order latent variable approach. *Group & Organization Management*, 24(3), 300-339.
- Vroom, V. (1964). Work and Motivation. New York: Wiley.

Wood, S. J., & Wall, T. D. (2007). Work enrichment and employee voice in human resource management-performance studies. *The International Journal of Human Resource Management*, 18(7), 1335-1372.

- Walton, R. (1985). From control to commitment in the workplace. In Handel, M. J. (Ed.), *The Sociology of Organizations: Classic, Contemporary, and Critical Readings* (pp. 114-122). Thousand Oaks: Sage.
- Wang, S., Guidice, R. M., Tansky, J. W. & Wang, Z.-M. (2010). When R&D spending is not enough: The critical role of culture when you really want to innovate. *Human Resource Management*, 49(4), 767-792.
- White, M., Hill, S., Mcgovern, P., Mills, C., & Smeaton, D. (2003). High-performance management practices, working hours and work-life balance. *British Journal of Industrial Relations*, 41(2), 175-195.
- Wood, S. (1999). Human resource management and performance. *International Journal of Management Reviews*, 1(4), 367-413.
- Wood, S. J., & Wall, T. D. (2007). Work enrichment and employee voice in human resource management-performance studies. *International Journal of Human Resource Management*, 18(7), 1335-1372.
- Wright, P. M., Gardener, T. M. & Moynihan, L. M. (2003). The impact of HR practices on performance of business units. *Human Resource Management Journal*, 13(3), 21-36.
- Wright, P. M., & McMahan, G.C. (1992). Theoretical perspectives for strategic human resource management. *Journal of Management*, 18, 295-320.
- Wright, P. M., McMahan, G. C. & McWilliams, A. (1994). Human resources and sustained competitive advantage: A resource-based perspective. *International Journal of Human Resources Management*, *5*, 301-326.
- Yoon, S. W., Song, J. H., Lim, D. H. & Joo, B.-K (2010). Structural determinants of team performance: the mutual influences of learning culture, creativity, and knowledge. *Human Resoruce Development International*, 13(3), 249-264.
- Zhang, X., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: the influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of Management Journal*, 53(1), 107-128.
- Zhu, W., Avolio, B. J., & Walumba, F. O. (2009). Moderating role of follower characteristics with transformational leadership and follower work engagement. *Group & Organizational Management*, 34(5), 590-619.
- Zhou, J. (1998). Feedback valence, feedback style, task autonomy, and achievement orientation: Interactive effects on creative performance. *Journal of Applied Psychology*, 83(3), 261-276.