WHEN THE TIME COMES TO "GO INNOVATIVE" TO TAKE OFF IN THE INNOVATION RUSH: THE IMPACT OF INNOVATIVE WORKPLACE, RESILIENCY AND PASSION ON WELL-BEING AND JOB PERFORMANCE OF U.S. EMPLOYEES

by

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(Under the Direction of Karl W. Kuhnert)

ABSTRACT

Innovation is the gold rush of the 21st century. To take off in the innovation rush requires "going innovative" as the entire organization, and innovative workplace plays the most critical role as it substantially influences employees who are the true initiators and executors of all new product and service development. The present study examines (a) the impact of innovative workplace on employee well-being and job performance, (b) the unique influences of innovative workplace and resiliency and passion for innovation on employee well-being, and (c) the differential impact of innovative workplace on employee job performance depending on employee passion and resiliency for innovation. Results show that innovative workplace has a positive impact on the well-being of employees which in turn promotes their job performance. Findings also reveal that innovative workplace and resiliency and passion for innovation have unique positive influences on employee well-being and that the impact of innovative workplace on employee job performance is stronger for employees with lower resiliency and passion for

innovation. The contributions of this study have crucial theoretical and practical implications for scholars and practitioners. Especially in today's highly disruptive business environment, these implications may provide practitioners and scholars with invaluable insight into the substantial value in establishing and maintaining innovative workplace and in integrating resiliency and passion for innovation into selection criteria and staffing process to achieve greater employee well-being and job performance in U.S. organizations.

INDEX WORDS: Innovation, Innovative Workplace, Innovative Leadership, Innovative Culture, Resiliency for Innovation, Passion for Innovation, Well-Being, Job Performance

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DEDICATION

Once again and always

To my parents, Fazilet and Mehmet Bayhan Oztunc

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Once again, my most heartfelt thanks first and undoubtedly foremost to my parents for all the sacrifices they have made and all the dedication they have shown for my education, and then to my wife, my daughter, my sons, my brother and my mentor for all of their encouragement, support and inspiration.

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CHAPTER 1

INTRODUCTION

Innovation is the gold rush of the 21st century. Just as prospectors who found and capitalized on gold before others became rich 168 years ago, organizations that find and capitalize on innovation opportunities before competitors become prosperous today. Furthermore, just as the working environment in those days was so harsh that a vast number of prospectors who could not find gold were not able to survive, the business environment today is so disruptive that a huge number of organizations that cannot innovate are not able to stay alive (e.g., O'Brien, 2003; Rosen, 2015). To take off in the innovation rush thus requires "going innovative" as the entire organization, and innovative workplace plays the most critical role as it substantially influences employees who are the true initiators and executors of all new product and service development (e.g., Hisrich & Peters, 1986; Kanter, 1983; Stopford & Baden-Fuller, 1994). In fact, the vital importance of innovative workplace for organizational innovation and prosperity has been well established (e.g., Amabile, 1988; Amabile, Conti, Coon, Lazenby, & Herron, 1996; Ireland, Hitt, & Sirmon, 2003; Shalley, Gilson, & Blum, 2000).

The term innovative concerns the creation of new and improvement of existing products or services (e.g., Benner & Tushman, 2003). In the context of workplace, going innovative essentially involves establishing a work environment that is conducive to successfully creating new and improving existing products or services (e.g., Amabile, 1988; Shalley, Gilson, & Blum, 2000). At the unit level, this necessitates innovative leadership and innovative culture that

promote not only employee innovation but also the well-being and job performance of employees which help them continuously engage in the challenging task of innovating (e.g., Scott & Bruce, 1994; Yuan & Woodman, 2010). Thus, it is imperative to ask how innovative workplace, as characterized by innovative leadership and innovative culture, impacts the well-being of employees which in turn promotes their job performance since innovations are better initiated and carried out by individuals with greater well-being and job performance (e.g., Amabile, Hadley, & Kramer, 2002; Huhtala & Parzefall, 2007). Moreover, it is also important to ask how employee characteristics with regard to innovation, including passion and resiliency for innovation, influence employee well-being leading to greater job performance (e.g., Ho, Wong, & Lee, 2011; Luthans, Avolio, Avey, & Norman, 2007). Furthermore, it is equally crucial to ask how the impact of innovative workplace on employee job performance varies depending on passion and resiliency for innovation as employee characteristics (e.g., Janssen, Lam, & Huang, 2010; Shin, Taylor, & Seo, 2012).

Integrating theoretical and empirical insights from relevant literatures by drawing from three different theories and pertinent findings, the present study seeks to develop and test a model (Figure 1) that addresses the questions above. More specifically, I first address the question of how innovative workplace impacts the well-being of employees which in turn influences their job performance. In so doing, I draw from the effectuation theory (Sarasvathy, 2001), the conservation of resources theory (Hobfoll, 1989) and the broaden-and-build theory (Fredrickson, 2001), and propose a holistic and parsimonious perspective involving two core facets of a work environment – leadership and culture (e.g., Amabile, Conti, Coon, Lazenby, & Herron, 1996; Ireland, Hitt, & Sirmon, 2003; Schein, 2010). Second, I address how passion and resiliency for innovation as employee characteristics influence employee well-being as well as

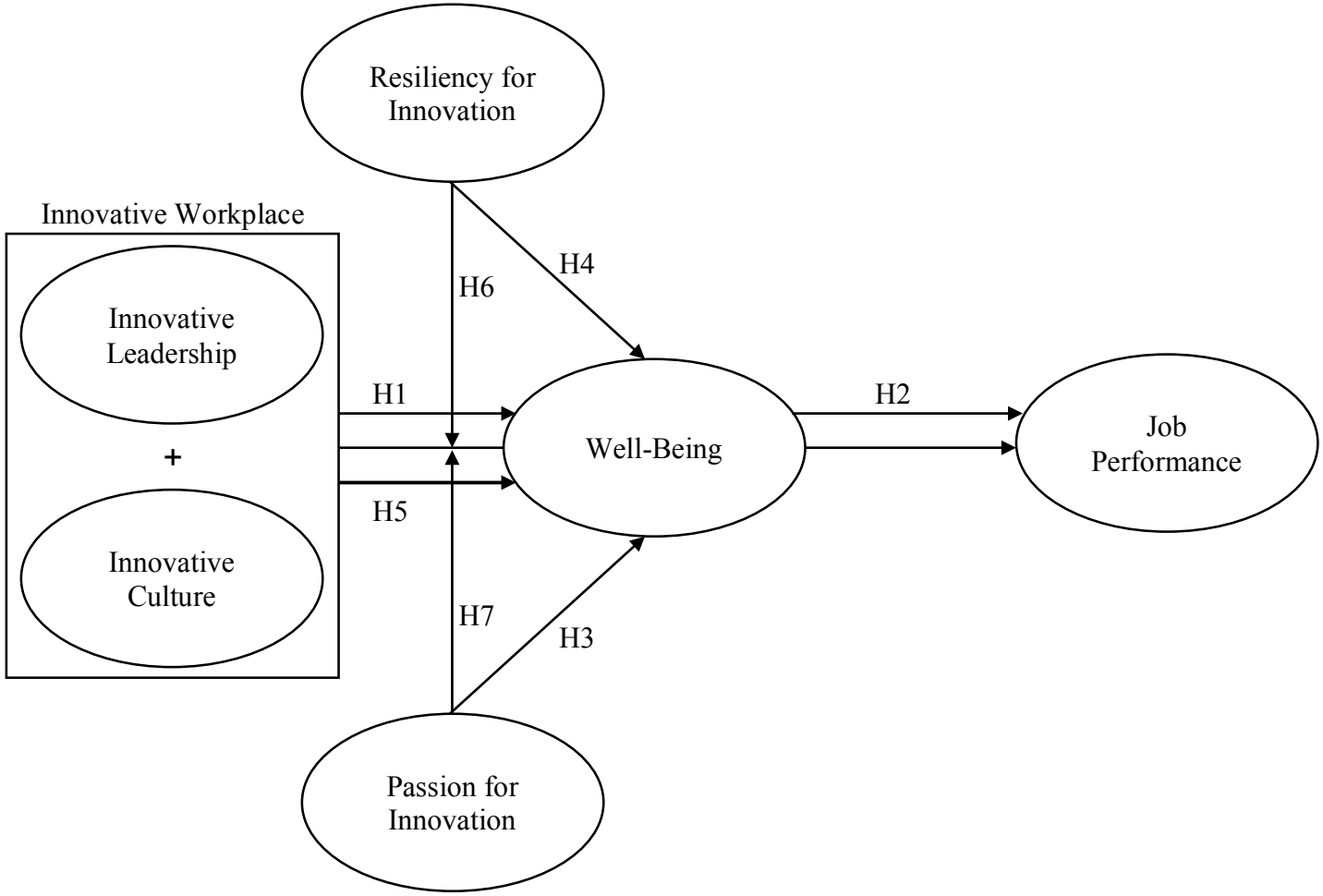
how innovative workplace has a unique impact on employee well-being above and beyond passion and resiliency for innovation. In doing so, I draw from the broaden-and-build theory (Fredrickson, 2001) and the conservation of resources theory (Hobfoll, 1989), and suggest a mechanism explaining the unique importance of innovative workplace and resiliency and passion for innovation for the well-being of employees. Finally, I address how the influence of innovative workplace on employees' job performance varies depending on their passion and resiliency for innovation. In so doing, I draw from the broaden-and-build theory (Fredrickson, 2001) and identify innovative workplace as a key determinant particularly promoting the job performance of certain employees.

The current study makes several major contributions to the innovation literature. First, by integrating relevant literatures both theoretically and empirically, this study offers a more comprehensive understanding of the impact of innovative workplace on employee well-being which in turn promotes employee job performance. Second, by involving three different theories and pertinent findings, the present study portrays a more complete picture of the unique influences of innovative workplace and resiliency and passion for innovation on employee well-being. Third, by examining the differential impact of innovative workplace on employee job performance depending on employee passion and resiliency for innovation, the current study sheds light on the vital importance of innovative workplace for organizations in general and for certain employees in particular. As will be discussed in the last section of this study, these contributions have crucial theoretical and practical implications for scholars and practitioners. Especially in today's highly disruptive business environment, the implications of the present study may provide practitioners and scholars with invaluable insight into the substantial value in establishing and maintaining innovative workplace and in integrating resiliency and passion for

innovation into selection criteria and staffing process to achieve greater employee well-being and job performance in U.S. organizations.

Figure 1

Proposed Model of Innovative Workplace and Summary of Hypotheses



CHAPTER 2

LITERATURE REVIEW & HYPOTHESES

Innovative Workplace

The discovery and exploitation of innovation opportunities that can generate profit, which occurs through creating new and improving existing products or services in the context of organizations, is undoubtedly challenging (e.g., Drucker, 1985, 1998; O'Conner & Rice, 2001; Valikangas & Gibbert, 2005). Because such opportunities consist of situations at the end of which new or improved products or services are introduced to customers with the goal of generating profit, they are uncertain and risky (e.g., Kanter, 1985, 1988). To engage in the discovery and exploitation of those opportunities requires a distinct work environment in which employees could pursue and achieve innovation despite all the challenges, failures and adversities (e.g., Amabile, 1988; Amabile, Conti, Coon, Lazenby, & Herron, 1996; Shalley, Gilson, & Blum, 2000). This work environment is conceptualized in the current research as a multidimensional construct involving innovative leadership and innovative culture, and is called innovative workplace.

In line with the effectuation theory (Sarasvathy, 2001) and the conservation of resources theory (Hobfoll, 1989), this conceptualization views these work environment characteristics as holistically and parsimoniously describing what resources employees have in order to engage in innovation and treats them as a set of given means through which employees can pursue and achieve various innovations that can generate profit (e.g., Hulsheger, Anderson, & Salgado,

2009; Janssen, 2005; Scott & Bruce, 1994). In other words, innovative leadership and innovative culture provide employees with psychological and relational resources or means in order for them to continuously engage in the discovery and exploitation of innovation opportunities in organizations through creating new and improving existing products or services. To illustrate, because innovation is a very challenging process full of uncertainties and risks, employees should be psychologically supported by supervisors in their pursuit of desired outcomes, as characterized by innovative leadership. Likewise, because innovation involves certain tasks full of failures and adversities, employees should be relationally and psychologically supported through a nurturing and stimulating work environment, as characterized by innovative culture. Thus, both of these work environment characteristics should be present in a workplace in order for employees to engage in and achieve the discovery and exploitation of innovation opportunities (e.g., Amabile, 1988; Amabile, Conti, Coon, Lazenby, & Herron, 1996; Ireland, Hitt, & Sirmon, 2003; Kanter, 1985, 1988; Shalley, Gilson, & Blum, 2000).

Innovative Workplace and Employee Well-Being

As discussed above, innovative workplace is characterized as consisting of two core facets of a work environment conducive to successfully creating new and improving existing products or services: innovative leadership and innovative culture (e.g., Amabile, Conti, Coon, Lazenby, & Herron, 1996; Ireland, Hitt, & Sirmon, 2003; Judge, Fryxell, & Dooley, 1997; Siegel & Kaemmerer, 1978). Innovative leadership refers to an individual's ability to mobilize others in creating new and improving existing products or services (e.g., Chemers, 2002; Conger & Kanungo, 1987; Huy, 1999; Reicher & Hopkins, 2004; Van Knippenberg & Hogg, 2003). In line with the conservation of resources theory (Hobfoll, 1989), innovative leadership of supervisors

influences employee well-being in several ways. For instance, because supervisors who demonstrate innovative leadership mobilize employees by providing them with various psychological resources such as empowerment, inspiration, encouragement, vision and idealized goals, employees feel psychologically supported in their pursuit of desired outcomes, which in turn increases their well-being in the workplace (e.g., Dierendonck, Haynes, Borrill, & Stride, 2004). In addition, because supervisors who exhibit innovative leadership also create positive workplace events such as exploration, creativity and experimentation in order to mobilize employees, such experiences generate positive affect in employees as psychological resources, and this in turn enhances their well-being at work (e.g., Bono, Glomb, Shen, Kim, & Koch, 2013). Research findings have provided empirical evidence for the impact of leader support and workplace events on employee well-being (e.g., Dana & Griffin, 1999). As a result, with the psychological support and positive experiences provided through the innovative leadership of supervisors, employees should be more likely to have greater well-being.

Innovative culture is defined as a set of shared values and beliefs that promote creating new and improving existing products or services (e.g., Barney, 1986; Chatman & Jehn, 1994; Gordon & DiTomaso, 1992; Marcoulides & Heck, 1993; O'Reilly, Chatman, & Caldwell, 1991). In keeping with the conservation of resources theory (Hobfoll, 1989), innovative culture impacts employee well-being in several ways. For example, by recognizing, emphasizing and believing in the importance of such positive work events as idea generation, flexible thinking and creative problem solving, such culture establishes and reflects positive social expectations and norms in the workplace (e.g., Koopmann, Lanaj, Bono, & Campana, 2016). Those positive expectations and norms, in turn, build and stimulate such psychological resources as positive affect in employees that promote their well-being at work (e.g., Fredrickson, 2001). Furthermore, by

recognizing, appreciating and valuing positive workplace behaviors that build relational resources such as cooperation, teamwork and prosocial behavior, innovative culture creates a nurturing and stimulating environment for employees (e.g., Grant & Gino, 2010; Zien & Buckler, 1997). In such an environment, those relational resources help employees fulfill their basic psychological needs such as relatedness and social self-worth, which in turn enhances their well-being in the workplace (e.g., Grant & Sonnentag, 2010). Earlier studies have frequently revealed that cultures that emphasize positive work events and reward positive workplace behaviors have positive effect on employee well-being (e.g., Carr, Schmidt, Ford, & DeShon, 2003). As a result, with the environment, social expectations and norms that provide psychological and relational resources through positive workplace events and behaviors, innovative culture should yield increased employee well-being at work. Taken together, the following hypothesis is suggested:

Hypothesis 1: Innovative workplace is positively related to employee well-being.

Promoted by innovative workplace as discussed above, employee well-being fosters key employee outcomes including job performance (e.g., Wright & Cropanzano, 2000; Wright, Cropanzano, & Bonett, 2007). Well-being refers to an individual's overall effectiveness in terms of his or her psychological health and functioning (e.g., Matthews, Wayne, & Ford, 2014; Wright & Bonett, 2007; Wright & Cropanzano, 2000). In addition to the positive impact of employee well-being on job performance that has been consistently reported by scholars in previous research (e.g., Wright, Cropanzano, & Bonett, 2007), employee well-being influences job performance in several other ways. For example, in line with the conservation of resources theory (Hobfoll, 1989), because employees with increased well-being have greater psychological

resources, they are more likely to use those resources in order to better perform their jobs (e.g., Matthews, Wayne, & Ford, 2014). Moreover, in keeping with the broaden-and-build theory (Fredrickson, 2001), because well-being, by its very nature, involves positive affect that stimulates flexibility in thinking, employees with increased well-being are more likely to find a greater variety of ways to successfully fulfill their job responsibilities (e.g., Lyubomirsky, King, & Diener, 2005). As a result, with greater psychological and cognitive resources, employees with increased well-being should have higher job performance. Thus, the following hypothesis is suggested:

Hypothesis 2: Employee well-being is positively related to job performance.

Passion for Innovation

When engaging in the discovery and exploitation of innovation opportunities, while innovative workplace constitutes a key unit level determinant promoting employee well-being and success, passion for innovation functions as a vital individual level antecedent to the success and well-being of employees (e.g., Baron, 2008; Ho, Wong, & Lee, 2011; Smilor, 1997). Passion for innovation refers to intense desire with excitement and enthusiasm towards the discovery and exploitation of innovation opportunities which occurs through creating new and improving existing products or services in organizations (e.g., Baum & Locke, 2004; Cardon, Gregoire, Stevens, & Patel, 2013; Cardon, Wincent, Singh, & Drnovsek, 2009) and has long been considered fundamental by scholars and practitioners in explaining why some individuals, and not others, discover and exploit innovation opportunities for profit (e.g., Bhide, 1994; Smilor, 1997).

Passion for innovation offers substantial insight into why some individuals, and not others, discover and exploit innovation opportunities that can generate profit (e.g., Cardon, Gregoire, Stevens, & Patel, 2013). First, it serves as the core drive for individuals to engage in the highly challenging task of innovating (e.g., Bird, 1989; Ma & Tan, 2006). By its very nature, innovation that can generate profit is a challenging process which is full of uncertainties and risks (e.g., Dougherty & Hardy, 1996; Kanter, 1988; Li & Atuahene-Gima, 2001). In this respect, any individual attempt to engage in this process requires more than mere willingness. In other words, it is only the individuals with intense desire for innovation who can bare this process (e.g., Howell, Shea, & Higgins, 2005). Thus, characterized as intense desire, passion for innovation provides the full-blown excitement, enthusiasm and energy one would need in order to engage in the discovery and exploitation of opportunities for innovation (e.g., Baron, 2008; Bird, 1989; Cardon, Wincent, Singh, & Drnovsek, 2009; Smilor, 1997).

Passion for innovation also has crucial impact on employee well-being throughout the discovery and exploitation process of innovation opportunities (e.g., Shane, Locke, & Collins, 2003). In terms of the discovery of opportunities, it helps employees recognize novel information patterns, create unusual associations and identify unique innovation opportunities with high potential of profit, considerably increasing their likelihood of success in innovation which in turn enhances their well-being at work (e.g., Cardon, Wincent, Singh, & Drnovsek, 2009). The broaden-and-build theory (Fredrickson, 2001) offers strong support for the influence of passion on the discovery of innovation opportunities. Accordingly, because positive affect expands individuals' capacity to notice unusual and greater variety of possibilities, individuals with passion for innovation are more likely to discover innovation opportunities (e.g., Baron, 2008). Furthermore, there is considerable evidence that positive affect including passion positively

impacts opportunity discovery and well-being (e.g., Baron & Tang, 2011; Fredrickson & Joiner, 2002). As a result, employees who have passion for innovation should be more likely to have greater well-being to engage in the discovery of innovation opportunities.

As for the exploitation of opportunities, passion for innovation helps employees deal with the steps needed to implement the discovered innovation opportunity (e.g., Cardon, Wincent, Singh, & Drnovsek, 2009). For example, by encouraging flexibility in thinking, it enables employees to find creative ways of searching and obtaining resources needed for the exploitation of opportunities and this substantially enhances their chances of success in innovation which in turn increases their well-being at work (e.g., Lyubomirsky, King, & Diener, 2005). In keeping with the broaden-and-build theory, individuals with passion for innovation are more likely to have heightened capacity to recognize a great variety of possibilities in searching for resources (e.g., Fredrickson, 2001; Matlin & Foley, 1997). In addition, empirical studies have shown that positive affect including passion has a positive influence on opportunity exploitation and well-being (e.g., Fredrickson & Joiner, 2002; Welpe, Sporrle, Grichnik, Michl, & Audretsch, 2011). Thus, employees with passion for innovation should be more likely to have greater well-being to engage in the exploitation of innovation opportunities.

Overall, these considerations suggest passion for innovation as a crucial antecedent of employee well-being when engaging in the discovery and exploitation of innovation opportunities. Thus, the following hypothesis is suggested:

Hypothesis 3: Passion for innovation is positively related to employee well-being.

Resiliency for Innovation

While the presence of passion for innovation in an individual is required in order for him or her to engage in innovation, it is not enough given the nature of innovation process (e.g., Drucker, 1998; Mohr & Sarin, 2009). That is, if there were no failures or adversities throughout this process, one would maintain his or her optimum level of passion and continue to engage in innovation. By its very nature, however, innovation is full of potential failures and adversities (e.g., Kanter, 1988; O'Conner & Rice, 2001; Valikangas & Gibbert, 2005). What happens when one experiences several failures or adversities of any kind during the discovery and exploitation of innovation opportunities? Would he or she have the same level of passion for innovation to move on after those failures or adversities? Most probably, not. Thus, passion for innovation needs to be complemented by resiliency for innovation in order to enable one to fully maintain his or her engagement in the discovery and exploitation of innovation opportunities despite all the failures and adversities (e.g., Markman, Baron, & Balkin, 2005).

Drawing from the literature of resiliency (e.g., Block & Kremen, 1996; Fredrickson, 2001; Luthans, 2002; Luthans, Vogelgesang, & Lester, 2006; Ong, Bergeman, Bisconti, & Wallace, 2006; Salovey, Bedell, Detweiler, & Mayer, 1999; Tugade & Fredrickson, 2004; Tugade, Fredrickson, & Barrett, 2004), resiliency for innovation is proposed as a new construct in the present research and is defined as the ability to rebound or bounce back from failures and adversities happening throughout the discovery and exploitation of innovation opportunities which occurs through creating new and improving existing products or services in organizations. Failures and adversities are inherent in the discovery and exploitation of innovation opportunities (e.g., Hamel & Valikangas, 2003; Henderson & Clark, 1990; Sitkin, 1992). Therefore, especially given the nature of innovation, it is very likely that in the event of any failures or adversities,

individuals even with passion for innovation might become discouraged (e.g., Bandura & Locke, 2003). More precisely, the failures and adversities occurring throughout the discovery and exploitation of innovation opportunities might diminish or even totally destroy the passion of individuals such that they could not put the same level of effort any more to engage in innovation or could even totally give up (e.g., Whyte, Saks, & Hook, 1997). Thus, it is only the individuals with ability to rebound or bounce back from failures and adversities who can continue to engage in the discovery and exploitation of innovation opportunities (e.g., Markman, Baron, & Balkin, 2005).

Resiliency for innovation influences employee well-being in different ways throughout the discovery and exploitation process of innovation opportunities. For instance, it helps employees recover quickly from failures (e.g., Hayward, Forster, Sarasvathy, & Fredrickson, 2010). Because resilient individuals find positive meaning in negative events, individuals with resiliency for innovation are more likely to see failures as opportunities for insight and learning, and this would in turn help them quickly recover from various failures occurring throughout the discovery and exploitation of innovation opportunities, considerably enhancing their well-being at work (e.g., Tugade & Fredrickson, 2004). Extensive theoretical and empirical support exists for the impact of resiliency for innovation on well-being of individuals and discovery and exploitation of innovation opportunities. For example, in keeping with the broaden-and-build theory, Tugade and Fredrickson (2004) found that resilient individuals experienced such positive emotions as eagerness, interest and excitement in negative situations, and this helped them find positive meanings and recover quickly from such situations. Likewise, Ong, Bergeman, Bisconti and Wallace (2006) showed that resilient individuals quickly recovered from negative situations through the assistance of positive emotions such as cheerfulness, happiness and peacefulness.

Another way in which resiliency for innovation impacts employee well-being throughout the discovery and exploitation of innovation opportunities is by helping employees quickly get over the disturbance of adversities (e.g., Dewald & Bowen, 2010). Because resilient individuals have broadened thought–action repertoire through which they consider a great variety of alternative thoughts and actions, individuals with resiliency for innovation are more likely to find creative ways of doings things in the face of adversity, leading to substantially greater well-being at work (e.g., Tugade & Fredrickson, 2004). Existing theoretical and empirical studies provide strong support for this impact. For instance, in line with the broaden-and-build theory, research has shown that resilient individuals experience positive emotions and that those emotions enable them to come up with a wide variety of novel thoughts and actions to solve problems in adverse situations, considerably increasing their well-being (e.g., Fredrickson, 2001; Isen, Daubman, & Nowicki, 1987; Tugade & Fredrickson, 2004).

Overall, these considerations suggest resiliency for innovation as a vital antecedent of employee well-being when engaging in the discovery and exploitation of innovation opportunities. Thus, the following hypothesis is suggested:

Hypothesis 4: Resiliency for innovation explains unique variance in well-being above and beyond that explained by passion for innovation.

Even with the presence of resiliency and passion for innovation, however, innovative workplace should still enhance the well-being of employees for several reasons. In line with the conservation of resources theory (Hobfoll, 1989), because innovative workplace provides employees with various psychological, relational and personal resources as described above, employees, including even those who are resilient and passionate about innovation, are more

likely to have greater well-being in such a workplace. For example, when employees work in an environment that provides empowerment as a psychological resource through which they can passionately pursue new product or service development opportunities, they are more likely to experience higher fulfilment and satisfaction which in turn enhances their well-being (e.g., Maynard, Gilson, & Mathieu, 2012). Likewise, when employees work in an environment that allows them to exercise resiliency as a personal resource through which they can take risks, experiment with ideas, and try and fail, they are more likely to experience higher fulfilment and satisfaction which in turn enhances their well-being (e.g., Spreitzer, Kizilos, & Nason, 1997). Thus, the following hypothesis is suggested:

Hypothesis 5: Innovative workplace explains unique variance in well-being above and beyond that explained by resiliency and passion for innovation.

Moderating Effects of Resiliency and Passion for Innovation

While innovative workplace should impact employee job performance, both directly and through its influence on employee well-being, the magnitude of this impact is likely to vary depending on individuals' resiliency and passion for innovation. In line with the broaden-and-build theory (Fredrickson, 2001), because individuals with higher resiliency for innovation see failures and adversities as opportunities for new insight and learning, they are less likely to allow those failures and adversities to negatively influence their job performance (e.g., Tugade & Fredrickson, 2004). By the same token, however, individuals with lower resiliency for innovation are more likely to be negatively affected by failures and adversities and therefore more likely to need the psychological, personal and relational resources of innovative workplace to maintain their job performance (e.g., Ong, Bergeman, Bisconti, & Wallace, 2006).

A similar effect should occur with passion for innovation. In keeping with the broaden-and-build theory (Fredrickson, 2001), because passion as positive affect serves as drive and ambition in one's pursuit of goals, expands one's capacity to notice greater variety of possibilities, create unusual associations and identify unique opportunities, and motivates one to work with others when pursuing goals, individuals with higher passion for innovation are more likely to achieve better job performance (e.g., Baron, 2008; Bird, 1989; Cardon, Wincent, Singh, & Drnovsek, 2009). By the same token, however, individuals with lower passion for innovation are more likely to be in need of additional drive, support and motivation and therefore more likely to need the psychological, personal and relational resources of innovative workplace to achieve better job performance (e.g., Lyubomirsky, King, & Diener, 2005). Taken together, the considerations described above suggest that innovative workplace should have stronger impact on the job performance of individuals with lower resiliency and passion for innovation. Thus, the following hypotheses are suggested:

Hypothesis 6: The effect of innovative workplace on employee job performance is moderated by resiliency for innovation such that the effect is stronger for those with lower resiliency for innovation.

Hypothesis 7: The effect of innovative workplace on employee job performance is moderated by passion for innovation such that the effect is stronger for those with lower passion for innovation.

CHAPTER 3

METHOD

Participants and Procedure

Participants of this study were 138 full-time employees from a wide variety of industries including technology, finance, advertising, entertainment, healthcare, marketing and insurance across the United States. Of the participants, 52.9 percent were female and 47.1 percent were male. They averaged 42.3 years of age, 8.8 years of job tenure and 9.9 years of organizational tenure. Participants were recruited and data were collected through a professional survey company. Participants completed the online measures for innovative leadership, innovative culture, resiliency for innovation, passion for innovation, well-being and job performance as well as age, gender, job tenure and organizational tenure. Breakdown of the sample by U.S. regions and divisions is presented in Table 1.

Measures

Innovative leadership. Innovative leadership in participants' workplace was assessed using five items adapted from Conger, Kanungo and Menon (2000). Participants indicated the extent to which their direct supervisors demonstrate innovative leadership in their business units by mobilizing others in creating new or improving existing products or services. Sample items were "My direct supervisor articulates for his/her team a clear vision for creating new or improving existing products or services", "My direct supervisor sets specific goals and mobilizes

his/her team towards those goals to achieve that vision" and "My direct supervisor empowers his/her team as they work towards those goals". The response scale ranged from 1 (strongly disagree) to 5 (strongly agree). The alpha reliability for this measure was .95.

Innovative culture. Five items adapted from Scott and Bruce (1994) were used to measure innovative culture of participants' workplace. Participants indicated the extent to which their business units are characterized by innovative culture manifested through shared values and beliefs that promote creating new or improving existing products or services. Sample items included "In my business unit, those who are innovative are recognized or appreciated", "In my business unit, generation of creative ideas is encouraged" and "In my business unit, people are allowed to try to solve the same problems in different ways". The response scale ranged from 1 (strongly disagree) to 5 (strongly agree). The alpha reliability for this measure was .93. As conceptualized, innovative workplace score was calculated by aggregating the innovative leadership and innovative culture scores.

Resiliency for innovation. Resiliency for innovation was assessed using five items adapted from Block and Kremen (1996) and Wagnild and Young (1993). Participants indicated the extent to which they rebound or bounce back from failures and adversities that occur when creating new or improving existing products or services. Sample items were "I recover quickly from failures that occur when creating new or improving existing products/services", "I get over quickly the disturbance of adversities that occur when creating new or improving existing products/services" and "I continue to work on developing new or improving existing products/services in the face of failures and adversities". The response scale ranged from 1 (strongly disagree) to 5 (strongly agree). The alpha reliability for this measure was .85.

Passion for innovation. Five items adapted from Cardon, Gregoire, Stevens and Patel (2013) were used to measure passion for innovation. Participants indicated the extent to which they have intense desire towards creating new or improving existing products or services. Sample items included "I am excited to figure out how to make existing products/services better", "I am enthusiastic about searching for new ideas for products/services to offer" and "I am excited to figure out new ways to solve unmet market needs through new or improved products/services". The response scale ranged from 1 (strongly disagree) to 5 (strongly agree). The alpha reliability for this measure was .93.

Well-being. Well-being was assessed using four items adapted from the General Health Questionnaire (Banks, Clegg, Jackson, Kemp, Stafford, & Wall, 1980). Participants indicated the extent to which they experience each well-being item in the workplace. Sample items were "I feel reasonably happy all things considered at work" and "I am able to enjoy my normal day-to-day activities at work". The response scale ranged from 1 (strongly disagree) to 5 (strongly agree). The alpha reliability for this measure was .85.

Job performance. Five items adapted from Williams and Anderson (1991) were used to measure job performance. Participants indicated the extent to which they perform their jobs. Sample items included "I meet formal performance requirements of my job", "I adequately complete my assigned duties" and "I fulfill responsibilities specified in my job description". The response scale ranged from 1 (strongly disagree) to 5 (strongly agree). The alpha reliability for this measure was .97.

Control variables. Age, gender, job tenure and organizational tenure were used as control variables in order to avoid potential confounding effects in line with previous research (e.g.,

Carnabuci & Dioszegi, 2015; Janssen & Van Yperen, 2004; Scott & Bruce, 1994; Yuan & Woodman, 2010).

Table 1

Breakdown of the Sample by U.S. Regions and Divisions

Region	%	Division	%
Northeast	15.2	New England	5.1
		Middle Atlantic	10.1
Midwest	28.3	East North Central	16.7
		West North Central	11.6
South	33.3	South Atlantic	16.7
		East South Central	6.5
		West South Central	10.1
West	21.0	Mountain	5.8
		Pacific	15.2
Unknown	2.2	Unknown	2.2

CHAPTER 4

RESULTS

Means, standard deviations, correlations and alpha reliabilities for the study variables are presented in Table 2. Data were analyzed using hierarchical linear regression. Before analyzing the data, a confirmatory factor analysis was conducted in order to verify the factor structure of study measures. As expected, a five-factor model – with innovative workplace as a higher order factor involving innovative leadership and innovative culture as lower order indicators – displayed a good fit with the data (χ^2[365] = 710.16, CFI = .91, SRMR = .07, RMSEA = .08), especially given the relatively small sample size of this study. All of the factor loadings were statistically significant, with an average of .83.

Hypothesis 1 predicts that innovative workplace is positively related to employee well-being. Hypothesis 1 was tested by conducting a hierarchical linear regression analysis with employee well-being as the outcome variable. Age, gender, job tenure and organizational tenure were entered as control variables in the first step. Innovative workplace was entered as predictor variable in the second step. Results indicated a significant positive association between innovative workplace and employee well-being (β = .68 , p < .01). Thus, Hypothesis 1 was supported. Table 3 displays the results of hierarchical linear regression analysis.

Hypothesis 2 predicts that employee well-being is positively related to job performance. Hypothesis 2 was tested by conducting a hierarchical linear regression analysis with employee job performance as the outcome variable. Age, gender, job tenure and organizational tenure were

entered as control variables in the first step. Employee well-being was entered as predictor variable in the second step. Results revealed a significant positive association between employee well-being and employee job performance ($\beta = .45$, $p < .01$), corresponding almost exactly with that found by Wright, Cropanzano and Bonett (2007) who used supervisory ratings to measure employee job performance. Thus, Hypothesis 2 was supported. Table 4 presents the results of hierarchical linear regression analysis.

Hypothesis 3 predicts that passion for innovation is positively related to employee well-being, while Hypothesis 4 predicts that resiliency for innovation explains unique variance in well-being above and beyond that explained by passion for innovation. Furthermore, Hypothesis 5 predicts that innovative workplace explains unique variance in well-being above and beyond that explained by resiliency and passion for innovation. Hypotheses 3, 4 and 5 were tested by conducting a hierarchical linear regression analysis with well-being as the outcome variable. Age, gender, job tenure and organizational tenure were entered as control variables in the first step. Passion for innovation was entered as predictor variable in the second step. Results indicated a significant positive association between passion for innovation and employee well-being ($\beta = .28$, $p < .01$). Next, resiliency for innovation was entered as additional predictor variable in the third step. Results revealed that resiliency for innovation explained unique variance in well-being above and beyond that explained by passion for innovation ($\beta = .48$, $p < .01$). Finally, innovative workplace was entered as additional predictor variable in the fourth step. Results showed that innovative workplace explained unique variance in well-being above and beyond that explained by resiliency and passion for innovation ($\beta = .59$, $p < .01$). Thus, Hypotheses 3, 4 and 5 were supported. Table 5 displays the results of hierarchical linear regression analysis.

Hypothesis 6 predicts that the effect of innovative workplace on employee job performance is moderated by resiliency for innovation such that the effect is stronger for those with lower resiliency for innovation. Hypothesis 6 was tested by conducting a hierarchical linear regression analysis with employee job performance as the outcome variable. Age, gender, job tenure, organizational tenure and passion for innovation were entered as control variables in the first step. Innovative workplace and resiliency for innovation were entered in the second step and their interaction was entered in the third step. Results showed that the effect of innovative workplace on employee job performance was moderated by resiliency for innovation (β = -1.30, $p < .01$). Table 6 displays the results of hierarchical linear regression analysis. Furthermore, the interaction plot (Figure 2) revealed that the effect of innovative workplace on employee job performance was stronger for those with lower resiliency for innovation. Thus, Hypothesis 6 was supported.

Finally, Hypothesis 7 predicts that the effect of innovative workplace on employee job performance is moderated by passion for innovation such that the effect is stronger for those with lower passion for innovation. Hypothesis 7 was tested by conducting a hierarchical linear regression analysis with employee job performance as the outcome variable. Age, gender, job tenure, organizational tenure and resiliency for innovation were entered as control variables in the first step. Innovative workplace and passion for innovation were entered in the second step and their interaction was entered in the third step. Results revealed that the effect of innovative workplace on employee job performance was moderated by passion for innovation (β = -.94, $p <$ .05). Table 7 presents the results of hierarchical linear regression analysis. Furthermore, the interaction plot (Figure 3) showed that the effect of innovative workplace on employee job

performance was stronger for those with lower passion for innovation. Thus, Hypothesis 7 was supported.

Table 2

Means, Standard Deviations, Correlations and Alpha Reliabilities

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9
1. Innovative Workplace	7.22	1.89	(.94)								
2. Resiliency for Innovation	3.88	.66	.31**	(.85)							
3. Passion for Innovation	3.84	.82	.19*	.62**	(.93)						
4. Well-Being	3.90	.84	.67**	.42**	.23**	(.85)					
5. Job Performance	4.49	.65	.17*	.53**	.36**	.45**	(.97)				
6. Age	42.33	13.27	-.04	-.06	-.01	.12	.08	-			
7. Gender	1.53	.50	.10	-.20*	-.25**	.07	-.01	-.13	-		
8. Job Tenure	8.75	8.30	-.05	-.07	-.10	.12	.04	.60**	-.03	-	
9. Organizational Tenure	9.93	9.34	.01	-.13	-.10	.08	.04	.61**	-.02	.56**	-

Note. Alpha reliabilities are shown in parentheses along the diagonal.

* $p < .05$. ** $p < .01$.

Table 3

Regression Results for Innovative Workplace Predicting Well-Being

Variable	Step 1	Step 2
Age	.09	.12
Gender	.08	.02
Job Tenure	.08	.12
Organizational Tenure	-.02	-.07
Innovative Workplace		.68**
R^2	.02	.48
R^2 Change		.46**

Note. Standardized beta coefficients are reported.

* $p < .05$. ** $p < .01$.

Table 4

Regression Results for Well-Being Predicting Job Performance

Variable	Step 1	Step 2
Age	.09	.05
Gender	.01	-.03
Job Tenure	-.01	-.04
Organizational Tenure	-.01	.00
Well-Being		.45**
R^2	.00	.20
R^2 Change		.20**

Note. Standardized beta coefficients are reported.

* $p < .05$. ** $p < .01$.

Table 5

Regression Results for Unique Impact of Innovative Workplace on Well-Being

Variable	Step 1	Step 2	Step 3	Step 4
Age	.09	.07	.10	.12
Gender	.08	.15	.18	.08
Job Tenure	.08	.10	.07	.11
Organizational Tenure	-.02	.01	.04	-.03
Passion for Innovation		.28**	-.01	-.03
Resiliency for Innovation			.48**	.29**
Innovative Workplace				.59**
R^2	.02	.09	.23	.54
R^2 Change		.07**	.14**	.31**

Note. Standardized beta coefficients are reported.

* $p < .05$. ** $p < .01$.

Table 6

Regression Results for Resiliency for Innovation as Moderator Predicting Job Performance

Variable	Step 1	Step 2	Step 3
Age	.06	.09	.11
Gender	.10	.13	.10
Job Tenure	.03	-.01	.00
Organizational Tenure	.03	.07	.03
Passion for Innovation	.39**	.07	.04
Innovative Workplace		-.02	.98**
Resiliency for Innovation		.53**	1.10**
Innovative Workplace X Resiliency for Innovation			-1.30**
R^2	.14	.31	.36
R^2 Change		.17**	.05**

Note. Standardized beta coefficients are reported.

* $p < .05$. ** $p < .01$.

Figure 2

Interaction Plot for Resiliency for Innovation as Moderator Predicting Job Performance

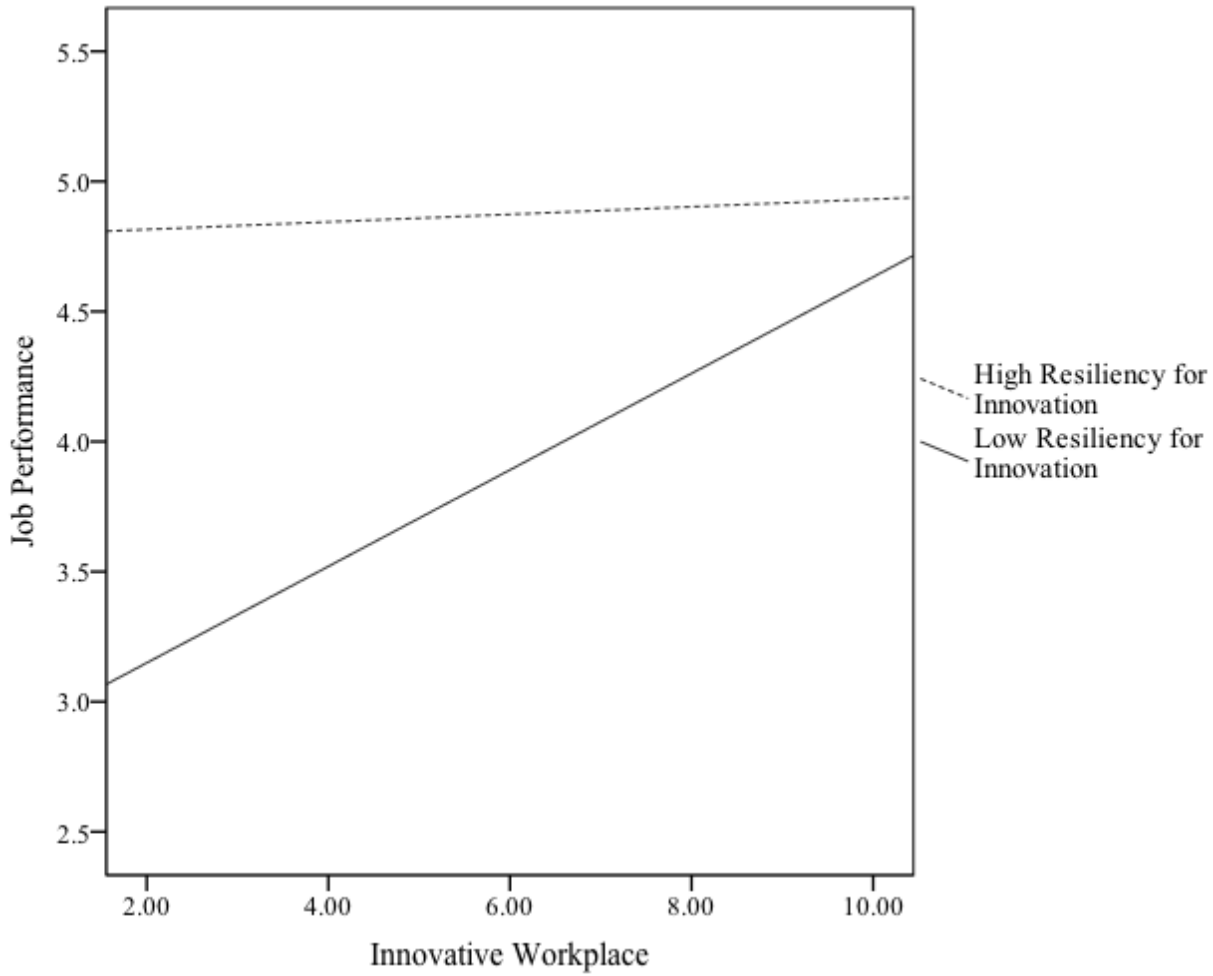


Table 7

Regression Results for Passion for Innovation as Moderator Predicting Job Performance

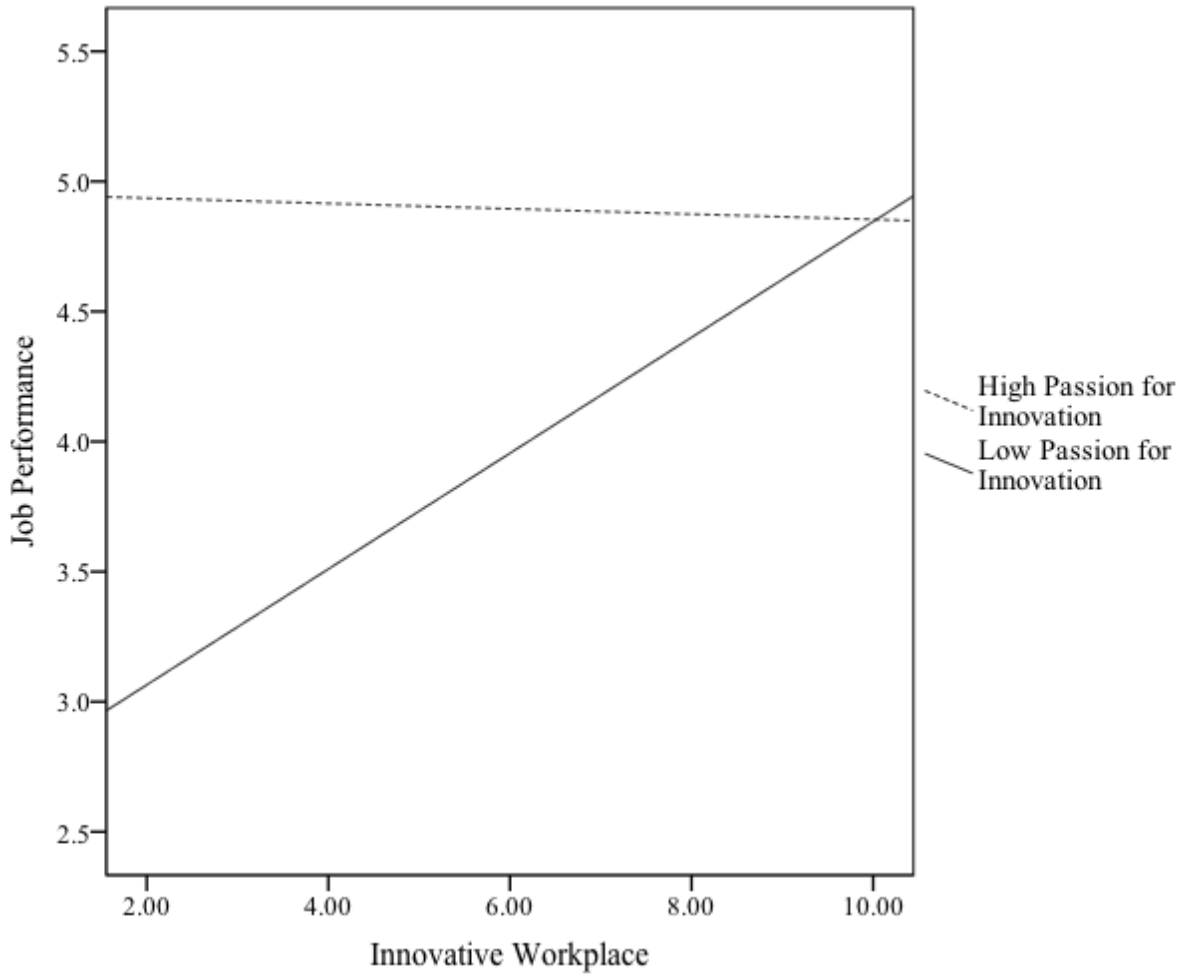
Variable	Step 1	Step 2	Step 3
Age	.10	.09	.12
Gender	.12	.13	.10
Job Tenure	-.01	-.01	-.01
Organizational Tenure	.06	.07	.03
Resiliency for Innovation	.57**	.53**	.52**
Innovative Workplace		-.02	.70*
Passion for Innovation		.07	.53*
Innovative Workplace X Passion for Innovation			-.94*
R^2	.31	.31	.34
R^2 Change		.00	.03*

Note. Standardized beta coefficients are reported.

* $p < .05$. ** $p < .01$.

Figure 3

Interaction Plot for Passion for Innovation as Moderator Predicting Job Performance



CHAPTER 5

DISCUSSION

General Discussion and Implications

Innovation is indispensable for today's organizations (e.g., Hitt, Ireland, Camp, & Sexton, 2001). To succeed and survive in a highly disruptive business environment, organizations should continuously innovate and this requires employees who have greater well-being and job performance to engage in the challenging task of innovating (e.g., McGrath & MacMillan, 2000). With this in mind, the present study developed and tested a model that introduced three key and innovation-related determinants impacting employee well-being and job performance in organizations – innovative workplace, resiliency for innovation, and passion for innovation.

Investigations of these factors are vital for several reasons. First, although existing literature highlights the importance of innovative workplace for successfully creating new and improving existing products or services in organizations, it falls short of offering a theory-driven and empirical conceptualization that holistically and parsimoniously describes what constitutes innovative workplace and how it impacts the well-being and job performance of employees who are the true initiators and executors of all new product and service development (e.g., Kanter, 1983; Stopford & Baden-Fuller, 1994). Second, while scholars and practitioners have long considered passion fundamental for individuals' engagement in innovation including creating new and improving existing products or services, current literature has overlooked the influence

of passion for innovation on employee well-being, which is particularly crucial since innovations are better initiated and carried out by individuals with greater well-being leading to higher job performance (e.g., Smilor, 1997; Wright, Cropanzano, & Bonett, 2007). Third, although innovation is full of potential failures and adversities by its very nature and individuals are most likely to experience those failures and adversities which might diminish their well-being when creating new and improving existing products or services, existing research is silent on a fundamental employee characteristic that provides employees with the ability to rebound or bounce back from such failures and adversities (e.g., Markman, Baron, & Balkin, 2005). This employee characteristic has been proposed as a new construct in the present research and is called resiliency for innovation. Finally, while innovative workplace is expected to influence employee job performance in general for theoretical and empirical reasons, the question of whether it might have stronger impact on certain employees and might thus be more important for particular organizations deserves special attention (e.g., Hayward, Forster, Sarasvathy, & Fredrickson, 2010). Hence, the current study examined the differential impact of innovative workplace on employee job performance depending on two core innovation-related employee characteristics – employee passion and resiliency for innovation.

Several important findings emerged from the present study. Specifically, results revealed that innovative workplace, as characterized by innovative leadership and innovative culture, was significantly and positively associated with employee well-being. Findings also showed that there was a significant and positive relationship between employee well-being and job performance. Drawing on the conservation of resources theory (Hobfoll, 1989), one potential explanation for these associations is that innovative workplace provides employees with a great variety of psychological, relational and personal resources such as empowerment, inspiration,

encouragement, cooperation, nurturing environment and creativity leading to increased well-being which in turn helps employees to better perform their jobs (e.g., Dierendonck, Haynes, Borrill, & Stride, 2004). Here, it is also important to consider the positive affect those resources generate in employees. That is, drawing on the broaden-and-build theory (Fredrickson, 2001), it might also be reasoned that the positive affect engendered by those resources provides employees with enthusiasm, energy and excitement which yield enhanced well-being leading to increased job performance (e.g., Fredrickson & Joiner, 2002). These results are of critical importance as employees who have greater well-being resulting in higher job performance would be one of the most important assets of organizations in achieving success and prosperity. Thus, these findings illustrate the substantial value in establishing and maintaining innovative workplace as characterized by innovative leadership and innovative culture for greater employee well-being and job performance in U.S. organizations.

In addition, results of the current study showed that passion for innovation was significantly and positively related to employee well-being yielding higher job performance. Moreover, findings also revealed that resiliency for innovation explained unique variance in employee well-being above and beyond that explained by passion for innovation. Drawing on the broaden-and-build theory (Fredrickson, 2001), it may be that passion for innovation as positive affect increases employees' chances of work success by expanding their capacity to notice a much wider variety of unusual possibilities, which in turn enhances their well-being and job performance in the workplace (e.g., Cardon, Wincent, Singh, & Drnovsek, 2009). Likewise, it may also be reasoned that resiliency for innovation helps employees, including even those who are passionate about innovation, recover quickly from work failures and adversities by enabling them to find positive meaning in negative events and to see those failures and adversities as

opportunities for new insight and learning, which again increases their well-being and job performance at work (e.g., Tugade & Fredrickson, 2004). These findings point to the importance of these individual characteristics for employee well-being and job performance. That is, both resiliency and passion for innovation as personal resources may play a considerable role in achieving greater employee well-being and job performance, and therefore might be integrated into the selection criteria and staffing process.

Furthermore, findings of the present study revealed the unique impact of innovative workplace on employee well-being. More specifically, results showed that innovative workplace explained unique variance in employee well-being above and beyond that explained by resiliency and passion for innovation. Drawing on the conservation of resources theory (Hobfoll, 1989), it may be that the psychological, relational and personal resources generated by innovative workplace enhance the well-being of employees including even those who are resilient and passionate about innovation. For instance, the empowerment provided by innovative workplace allows employees to passionately engage in the development of new and improvement of existing products or services and to resiliently take risks, experiment with ideas, try new approaches and fail throughout the process, which in turn engenders higher fulfilment and satisfaction leading to greater well-being in employees (e.g., Maynard, Gilson, & Mathieu, 2012; Spreitzer, Kizilos, & Nason, 1997). This unique impact is crucial as it suggests that organizations can substantially benefit from establishing innovative workplace to promote the well-being of their employees, including even those with higher passion and resiliency for innovation, and can thereby enjoy greater employee job performance resulting from the enhanced well-being.

Aside from the important relationships described above, what stands out most from the findings of the current study is that the impact of innovative workplace on employee job

performance varied depending on the individual characteristics of employees. That is, results of this study revealed that the effect of innovative workplace on employee job performance was moderated by resiliency for innovation and passion for innovation such that the effect was stronger for those with lower resiliency and passion for innovation. Drawing on the conservation of resources theory (Hobfoll, 1989) and the broaden-and-build theory (Fredrickson, 2001), one potential explanation is that because employees with lower resiliency for innovation are more likely to be negatively affected by failures and adversities, they need the psychological, personal and relational resources of innovative workplace more than employees with higher resiliency for innovation to maintain their job performance (e.g., Ong, Bergeman, Bisconti, & Wallace, 2006). Similarly, it may also be that because individuals with lower passion for innovation are more likely to be in need of additional cognitive and affective drive, support and motivation, they need the psychological, personal and relational resources of innovative workplace more than employees with higher passion for innovation to achieve better job performance (e.g., Lyubomirsky, King, & Diener, 2005).

These insights are perhaps the most intriguing results of this study and have substantial practical and theoretical implications. For instance, given the challenge of attracting, recruiting and hiring employees who are passionate about creating new and improving existing products or services and are resilient enough to move on in the face of failures or adversities that occur when creating new and improving existing products or services, innovative workplace may offer a unique opportunity through which to increase the job performance of employees who do not have such passion and resiliency for innovation. Thus, by establishing and maintaining innovative workplace, organizations can achieve greater employee job performance leading to

increased organizational success and prosperity in today's highly disruptive business environment.

Limitations and Future Research

As with all studies, the present study has some limitations which should be addressed in future research. For example, the cross-sectional nature of the data should be considered when interpreting the study results. Due to such nature, there may be alternative explanations for the observed relationships. Future research could utilize longitudinal data in order to examine the causal nature of the associations among the study variables. In addition, the relatively small sample size of this study should also be noted. The small sample size prevented the use of structural equation modeling to analyze the study data. Researchers could use larger samples that would allow for analyzing the data through more advanced statistical techniques. Another limitation concerns the use of self-report scales in measuring the study variables. Employing those scales presents potential common source bias. Although such scales have been commonly used in previous research, this should be kept in mind when interpreting the study findings. Future research could also employ other-report measures and collect data from multiple sources such as supervisors and co-workers. The representativeness of the study sample should also be noted. Although the sample consisted of participants from all regions and divisions of the United States, the unequal number of participants per division and the lack of information about other participant characteristics limit the generalizability of study results. Researchers could obtain more representative samples through different sampling strategies in order to achieve greater generalizability.

Conclusion

Innovation, the gold rush for the 21st century organizations, is imperative. The present research identifies innovative workplace, resiliency for innovation and passion for innovation as among the key determinants that can help organizations take off in the innovation rush through their impact on employee well-being and job performance. Once again, employees are the true initiators and executors of all new product and service development and all existing product and service improvement, and the successful creation and improvement of products and services can be better achieved by employees who have greater well-being and can thus better perform their jobs in the workplace. It is hoped that this study will spark further thinking and research about the unique values of innovative workplace and resiliency and passion for innovation for today's organizations.

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