

Full Length Research Paper

Influence of passion on innovative behavior: An empirical examination in Peoples Republic of China

Jiangtao Shi

School of Economics and Business Administration, Shanxi University, Taiyuan 030006, Peoples Republic of China.
E-mail: jtshi.2008@163.com.

Accepted 17 July, 2012

Passion plays an important role in innovation, but theoretical understanding of what it does is lacking. The study proposes a model of two types of job passion, harmonious and obsessive passion, to employees' innovative behavior, via the mediating mechanism of cognitive absorption and organization-based self-esteem (OBSE). Results from a survey conducted with 228 employees from 19 firms of China indicate that employees with harmonious passion have more innovative behavior at work, and that this relationship was mediated primarily by cognitive absorption and OBSE. However, even though obsessive passion was negatively related to OBSE, it did not have a significant relationship to cognitive absorption overall. The author identified and discussed research and practical implications for job passion and employees' innovative behavior.

Key words: Harmonious passion, obsessive passion, organization-based self-esteem, cognitive absorption, innovative behavior.

INTRODUCTION

The importance of innovation for organization is widely accepted (Yuan and Woodman, 2010; Tortoriello and Krackhardt, 2010). In particular, employee innovative behavior (for example, developing, adopting, and implementing new ideas for products and work methods) is an important asset that enables an organization to succeed in a dynamic business environment (Tortoriello and Krackhardt, 2010).

A variety of factors have been studied as important antecedents to individuals' innovation, such as organization culture and climate, relationship with their supervisors (Yuan and Woodman, 2010), job characteristics (Oldham and Cummings, 1996), social/group context (Yuan and Woodman, 2010), and individual differences (Bunce and West, 1995).

At the same time, the concept of passion of job has seen increased interest in the last few years (Ho and Wong, 2011; Shepherd and Cardon, 2009). Scholars have started to investigate the concept of passion in the workplace, and considerable evidence from interviews with managers, students, and scholars, suggests that employee can have passion for their jobs, and that passion makes an important contribution to their work

success (Cardon et al., 2009; Ho and Wong, 2011).

Although, prior research has suggested that inside passions can be important psychological considerations behind individual innovation, studies that directly theorize and test the effects of these passions are conspicuously missing. Yet research evidence regarding the intermediate psychological processes that would explain how and why different individual passions affect innovative behavior remains inconclusive and under-developed (Cardon et al., 2009; Ho and Wong, 2011). Thus, research is needed to establish whether having such passion is beneficial to employees' innovative behavior, and if so, identify the mechanisms through which passion relates to innovative behavior.

The goal of the present study is to address these important yet relatively unstudied issues. Drawing from social psychological perspectives in the innovation literature, in this study the author examine how an employee's innovative behavior is affected by his or her passion which can be distinguished and operationalized into two different forms-harmonious and obsessive passions.

The major contributions of this study are twofold. First,

this study is the first attempt to directly theorize and test the relationship between different passions to innovative behavior. Revealing these passions contributes to understanding of why employees innovate in a work place. Second, the author investigated the mediating roles of OBSE and cognitive absorption in the relationship, this study sheds light on how passion could affect employee innovation indirectly by shaping these intermediate psychological processes. Findings on these processes both contribute to theory development on individual innovation and help to suggest possible interventions to encourage employee innovation.

THEORETICAL BACKGROUND AND HYPOTHESES

Following Drazin et al. (1999), the author conceptualize innovation as a process rather than as an outcome: employee innovative behavior is a process of behaviours designed to generate new ideas, processes, products, and/or services, regardless of the ultimate success of these new phenomena. The author includes processes designed to produce innovative outputs that are both required and voluntary, and the result of both open and closed problems (Unsworth and Clegg, 2010). Finally, the study conceptualizes innovation as a process that is deliberately and intentionally undertaken (Yuan and Woodman, 2010). Thus, current research is focused on the deliberate (required or voluntary) undertaking of behaviors.

Most innovation research has followed the efficiency-oriented perspective, in which it is assumed that organizations make rational decisions in adopting innovation to maximize their efficiency gains. In each case, the underlying assumption is that innovations serve the economic function of improving efficiency and that innovation decisions are based on expected positive performance outcomes (Ho et al., 2011). More recently, innovation research has started to pay attention to social-psychological processes (Yuan and Woodman, 2010; Wang et al., 2010) that shed light on how innovation is actually carried out in the real world rather than how it should be done. Following this approach, in the following sections the author draw from the social-psychological perspective to test the relationship between passions and innovative behavior.

Passion and innovative behavior

Prior social psychological research in passion has conceptualized it as being of two distinct types – harmonious and obsessive passion (Vallerand and Houliort, 2003; Vallerand et al., 2003). While these two types of passion are similar in that they represent a force within individuals that drives them towards the activity they are passionate about, the key difference between

them is the way in which the activity is important to them and, in turn, how the activity is internalized (Amiot et al., 2006; Vallerand et al., 2003).

The two forms of passion capture the different bases of internalization (voluntary versus pressured), this also allows for the possibility that one form of passion may lead to positive outcomes while another may not. In the work context, harmonious passion is associated with a voluntary or autonomous internalization of the job, meaning that individuals freely and voluntarily view the job as important because of characteristics of the job itself (for example, the job being challenging). Individuals who are harmoniously passionate about their job do it because they choose to, not because of any pressures or outcomes (for example, feelings of social approval or recognition) deriving from the job. As such, they view the job as important and significant to them (Vallerand et al., 2003).

Obsessive passion, in contrast, is associated with a pressured internalization of the job, meaning that individuals view the job as important due to certain pressures or outcomes attached to the job (Shepherd and Cardon, 2009; Vallerand et al., 2003). For example, such pressures could be from feelings of superiority over others or social acceptance deriving from the job, which in turn compels the individual to continue with it so as to sustain these outcomes (Amiot et al., 2006). In turn, these pressures or outcomes come to control the person, who then feels compelled to pursue the activity in order to maintain this sense of prestige and self-worth.

Korman (2001) conceived of a dual motivational system operating in work organizations. One is the self-enhancement motivational system, which is activated when employees see an opportunity to achieve high performance goals, believe they can achieve them, whether the organization encouraging them to do so or not. Korman (2001) believes providing meaningful work and empowering employees to perform will lead to high self-enhancing employees. A second motivational system, which Korman terms self-protective motivation, is activated when employees feel they cannot meet performance expectations, and see the work environment as one that emphasizes punishment in motivating employees.

Damage control, as discussed previously, would be evident when self-protection motivation is in operation. This dualistic approach to passion has found support across several studies, including those by Vallerand et al. (2003), who validated a two-factor structure of passion and found that while both harmonious and obsessive passion were characterized by liking for the activity and viewing the activity as important to them, they engendered different psychological outcomes.

Specifically, harmonious passion resulted in positive affect and cognitions (for example, concentration) during and after pursuit of the passionate activity, whereas obsessive passion led to negative feelings (for example,

guilt) when pursuing the innovation. Similar findings were also observed in other studies; in particular, obsessive passion was consistently associated with multiple negative consequences, such as anxiety, feelings of shame and guilt, and a lack of concentration (Vallerand and Houliort, 2003; Yuan and Woodman, 2010). Potential risk will constrain employee innovativeness. An employee may choose to 'play it safe' and avoid 'rock-the-boat' innovative behaviors in order to prevent negative feeling.

On the basis of the evidence reviewed above, the study hypothesizes that:

H_{1a}: There is a positive association between harmonious passion and innovative behavior.

H_{1b}: There is a negative association between obsessive passion and innovative behavior.

Passion, absorption and OBSE

Building on these empirical study's findings, as well as theories in role investment, the author propose that in the work context, harmonious and obsessive job passion would be differentially related to one's cognitive engagement and self-esteem at work, defined as one's psychological presence and focus at work (Pierce and Gardner, 2004).

Several perspectives from role investment theory lead us to expect that individuals who are harmoniously passionate about their jobs would have greater cognitive absorption and attention when working. First, according to the identity perspective in role investment theory, employees will invest their time in a role they find important and pleasurable (that is, a role that they are passionate about), because it provides them with a source of self-esteem and self-actualization (Linn et al., 2000; McAllister and Bigley, 2002). Thus, these employees will have greater OBSE compared to those without such passion.

Harmonious passion increases the belief that one's work is meaningful and is associated with pride, commitment, empowerment, and energy (Bierly et al., 2000). In other words, OBSE is the embodiment of harmonious passion. It makes employees believe in what they are doing, which is important for realizing their dreams and achieving success against all odds (Heck et al., 2005).

Second, based on the utilitarian perspective, people tend to invest more time and effort in roles that they find enjoyable and pleasurable because of basic hedonistic tendencies (McAllister, 1953). Additionally, because harmoniously passionate employees have voluntarily internalized the job into their identities, they will be in their element when performing their job tasks and experience their work more fully and with little conflict with their other roles (Vallerand et al., 2003); thus, these employees will have greater absorption compared to those without such passion.

In the few empirical studies of passion, one outcome that has been examined is individuals' cognitive state of absorption when pursuing a passionate activity (Vallerand et al., 2003). When employee are aroused by their harmonious passion for activities associated with a meaningful identity, they experience intense excitement that comes from pursuit of deeply internalized goals such that they often ignore activities or people that may detract from it.

On the basis of the evidence reviewed above, the study hypothesizes that:

H_{2a}: Harmonious passion is positively related to cognitive absorption.

H_{2b}: Harmonious passion is positively related to OBSE.

Obsessive passion engenders a pressured internalization of the job such that it creates a rigid form of activity persistence that eventually conflicts with one's other roles and role identities (Vallerand et al., 2003).

In turn, because of different roles conflict, employees who are obsessively passionate about their jobs tend to be distracted by thoughts about the other roles and responsibilities that should be fulfilled but are not, and also by negative emotions (for example, feelings of shame, guilt, and anxiety) resulting from such conflict and obsession. Overall then, these conflicting thoughts and negative emotions prevent the employees from becoming fully absorbed with their job tasks. Furthermore, the rigid persistence that characterizes obsessive passion has been found to lead to burnout, emotional exhaustion and resulting in a diminished organization-based self-esteem" (Heck et al., 2005; Pierce and Gardner, 2004), which in turn impair one's attention and focus on the job.

On the other hand, Obsessive passions make a sense of lack of control. Effects associated with opportunities for participation and the exercise of control through participation in autonomous work groups on OBSE has been examined. In a study of employee owned organizations, Pierce (1997) reports a positive relationship ($r = 0.54$) between perceptions of influence/control and OBSE. Similarly, Bowden (2002) reports a positive relationship between work control and OBSE within her sample of British engineering consultants.

Vecchio (2000) observed a negative relationship ($r = -0.46$) between a sense of lack of control and OBSE, suggesting that coming to feel that one is not able to control work environmental forces adversely affects one's OBSE. Elloy and Randolph (1997) reasoned that leaders who permit their followers to exercise self-direction and self-control, and provide the follower with the opportunity to exercise competence and experience success, would avoid obsessive passions and contribute to OBSE.

On the basis of the evidence reviewed earlier, the study hypothesizes that:

H_{3a}: Obsessive passion is negatively related to cognitive absorption.

H_{3b}: Obsessive passion is negatively related to OBSE.

Absorption and innovative behavior

Absorption is a relatively stable cognitive state where an employee is psychologically present and focused on the job and its related activities, and has been characterized as a positive, fulfilling, and persistent cognitive state (Schaufeli et al., 2002). Absorption entails a much more intense level of concentration and immersion in one's work and relates to the quality of cognitive efforts and investment in work (Yuan and Woodman, 2010). Cognitive engaged workers will cognitively harness and invest their selves when performing their jobs, whereas disengaged workers tend to mentally detach or uncouple their selves from the job.

Engagement in tasks and activities that hold identity meaning is posited to be an experience akin to "flow," where employee become immersed in and feel in complete control of their activities such that they barely notice the passing of time or the people around them (Schindehutte et al., 2006). The combination of intense excitement and focus, which are defining characteristics of flow experiences, is central to absorption.

Some scholars suggest that innovators' success largely depends on their regulative capabilities to cultivate personal flow experiences (Schindehutte et al., 2006). Because of their intense focus and concentration on the job, they are better able to overcome obstacles that arise and, thus, become more successful and effective in innovation.

On the basis of the evidence reviewed above, the study hypothesizes that:

H₄: Cognitive absorption is positively related to innovative behavior.

OBSE and innovative behavior

Elaboration of the construct casts OBSE as a self-evaluation of one's personal adequacy (worthiness) as an organizational member. Pierce (1997) described self-esteem as the belief that one will be able to perform behaviors that provide positive outcomes. It reflects the self-perceived value that individuals have of themselves as important, competent, and capable within their employing organizations – employees with high organization-based self-esteem have come to believe that "I count around here." Consistent with Korman's (2001) view of self-esteem, people with strong organization-based self-esteem have a sense of having satisfied their needs through their organizational roles.

Korman theorized that individuals behave in a manner consistent with their self image. Therefore, those with high OBSE (who derive some of their positive sense of self from their work experiences) will make innovations to

help the organization. These contributions to the collectivity are an expression of high OBSE and allow employee to maintain consistency between their self-concept and their behavior.

Pierce (1997) and Pierce and Gardner (2004) provided empirical support for this by showing that those who perceive themselves as organizationally valuable engaged in behaviors which are valued by the organization, such as innovation. Adaptation to organizational change can be considered as one type of innovative behavior. Staehle-Moody (1998) reports that those with high OBSE do a better job coping with organizational change than their low OBSE counterparts, and that they are more proactive in their coping style.

Following the social-psychological perspective in understanding innovation, the author contends that employees are more likely to engage in innovative behavior when they have more OBSE and expect such behavior to benefit their work.

On the basis of the evidence reviewed above, the study hypothesizes that:

H₅: OBSE is positively related to innovative behavior.

In sum, this theoretical model suggests that harmonious passion and obsessive passion will affect individual innovative behavior indirectly by shaping cognitive absorption and organization-based self-esteem.

H₆: The relationship between harmonious passion and individual innovative behavior is mediated by cognitive absorption and organization-based self-esteem.

METHODS

After adopting the theoretical model to explain the relationship of job passion and employee innovative behavior, the author and his colleague conducted semi-structured interviews to refine constructs and their interrelations for application to Chinese culture. Later, author visited each participant and distributed the questionnaires to them. The participants were instructed to put their completed questionnaires into provided return envelopes and to seal them. On the next visit, the author collected the sealed envelopes. Complete confidentiality was guaranteed. We told participants that the study was designed to assess the passion of job and we did not indicate that innovative behavior also was the focus of the research.

Out of 280 questionnaires distributed, 228 usable questionnaires were returned, for an overall response rate of approximately 81%. Respondents included 92 female (40%) and 136 male (60%). Most respondents (84%) were in their 20 or 40 s. More than 86% respondents had graduated from university. Their functions included R and D (49%), comprehensive management (24%), production (8%), marketing (16%) and other functions (3%).

The employees were from 19 enterprises including state-owned enterprises (42%), privately-owned enterprises (33%), foreign-invested enterprises (21%) and other kinds of enterprises (4%). The percentage of employees from high-tech enterprises was 34%.

Measures

The author used seven-point likert-type scale for all the substantive

Table 1. Means, standard deviations and correlations among all variables.

	Mean	Standard deviation	1	2	3	4
Harmonious passion	5.14	1.06				
Obsessive passion	3.12	0.95	-0.17**			
Organization-based self-esteem	4.58	0.74	0.48**	-0.26**		
Cognitive absorption	3.91	1.20	0.32**	-0.11*	0.21**	
Innovative behavior	4.13	0.82	0.57**	-0.31**	0.63**	0.50**

N= 228; *P<0.05; **P<0.01.

variables in this study. Most of items were rated on a scale that ranged from "strongly disagree" (1) to "strongly agree" (7). For all the English items, the translation and back-translation procedures were employed. Slight modification was made to render the items to be consistent with the present research context.

Harmonious and obsessive passion: The passion variables were measured using the passion scale adapted by So et al. (2011) from Vallerand et al. (2003). Harmonious passion was captured with seven items. Sample items were 'this job is a passion that I manage to control', 'this job reflects the qualities I like about myself', and obsessive passion with another seven items. Sample items were 'I have almost an obsessive feeling for this job', 'I am emotionally dependent on this job'. Their scale reliabilities were 0.90 and 0.85, respectively.

Cognitive absorption: Cognitive absorption was measured using five items from Rothbard (2001) scale. Sample items were "when I am working, I often lose track of time." "I often get carried away by what I am working on." and "nothing can distract me when I am working." Cronbach's alpha on this scale was 0.91.

Organization-based self-esteem: Pierce and Gardner (2004) instrument for the measurement of organization-based self-esteem is a 10-item instrument. The instructions ask the respondent to think about his/her relationship with their employing organization and to indicate the degree to which they have come to believe in each of each of the following statements: "I count around here"; "I am taken seriously around here"; and "I am trusted around here." Cronbach's alpha on this scale was 0.93. The instrument has now been employed in more than a dozen countries (for example, Australia, Egypt, England, Hong Kong, Iceland, India, Israel, Japan, Korea, Mexico, New Zealand, Poland, Taiwan, Saudia Arabia, Singapore, United States).

Innovative behavior: The measurement of employee innovative behavior was adopted from Scott and Bruce (1994) with six items. Sample items were "searches out new technologies, processes, techniques, and/or product ideas" and "develop adequate plans and schedules for the implementation of new ideas." Supervisor indicated how characteristic each of behaviors was of a particular employee. Cronbach's alpha on this scale was 0.89.

This study also collected data for controls likely to provide alternative explanations for innovative behavior. Control variables were suggested by previous research (Wang et al., 2010), including employees' education level, gender, age, tenure, and function. Education was measured on a scale ranging from 1 (no education) to 9 (PhD), and gender with a dichotomous scale (0 = male; 1 = female). Tenure was measured as the number of years the respondent had been with the firm, and rank was measured based on the respondent's position in the organizational hierarchy. Additionally, the types of the company were also controlled.

RESULTS

Table 1 presents means, standard deviations, and correlations among all variables. It demonstrated that the harmonious passion and obsessive passion significantly correlated with employee innovation behaviors. Thus, hypothesis 1a and 1b were supported. Harmonious passion significantly and positively correlated with cognitive absorption and OBSE. Obsessive passion significantly and negatively correlated with OBSE. Thus, hypothesis 2 and 3b were supported. Cognitive absorption and OBSE were also significantly and positively correlated with the employee innovative behaviors. Thus, hypothesis 4 and 5 were supported.

To test the hypotheses, the author conducted structural equation model (SEM) analysis. The proposed relationship model of Figure 1 fitted the data fairly well ($\chi^2/df = 1.68$, RMSEA = 0.03, GFI = 0.91, CFI = 0.94, NFI = 0.93). Figure 1 demonstrated that except obsessive passion was not correlated with cognitive absorption, the other supposed relationships were examined. Thus, all the four hypotheses were fully supported except hypothesis 4a and part of hypothesis 6.

DISCUSSION AND CONCLUSION

The current study introduces a model of job passion and innovative behavior that illuminates the relationship between job passion, cognitive absorption, OBSE, and employee innovative behavior. Specifically, the theory contributes to research in several ways. First, this is one of the first in the social psychological literature to extend the concept of passion to organizational innovation, an activity that occupies a major part of organization. Prior to this, scholars have studied passion in relation to romance, gambling (Yuan and Woodman, 2010), and sports such as hockey (Amiot et al., 2006), venture growth (Baum et al., 2001), but passion research in the context of innovation has trailed behind. The bulk of this literature has consisted of practitioner oriented articles that allege the importance of job passion with little scientific evidence or formal definition of what passion really is, and qualitative studies that rely on students' or managers' speculative accounts of how they think

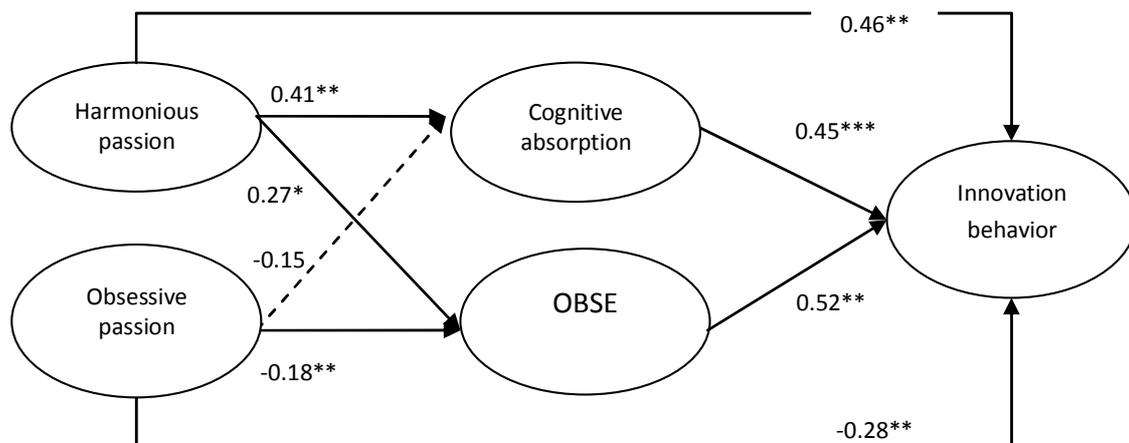


Figure 1. The hypothesis model and the results. Standardized parameter estimates are shown. Control variables are not shown here for the sake of clarity. Non-significant paths are denoted with dotted lines.

passion plays a role at work.

The current study demonstrate that employees can have harmonious or obsessive job passion; specifically, 81% of respondents reported having at least some harmonious passion for their jobs (with a median score of 5.14), and 54.0% of respondents have at least some obsessive passion (median score of 3.12). These results suggest that individuals can be passionate not only about traditional work-related activities, but also about their innovative behaviors. Given the role of job passion in the innovation process, this study warrants further consideration by both researchers and practitioners alike.

A second contribution of this study lies in the facts that while previous social psychological studies have demonstrated that harmonious and obsessive passion are different in relation to affective outcomes and psychological adjustment, and work performance, the study shows that the two forms of passion are also different in relation to employee innovative behaviors. Specifically, the study found that harmonious passion was positively related to innovative behaviors, whereas obsessive passion had negative relationship to innovative behaviors. The fact demonstrates that the passion construct will exhibit differential effects on innovative behaviors depending on the type of passion that one has. Conceptually, this finding is significant in that it not only challenges prior works that view passion as an unquestionably positive characteristic that should be developed in all employees, and instead suggests that not all forms of passion are valuable or desirable.

Another contribution of this study is the finding that cognitive absorption and OBSE is the primary mediating mechanism in the relationship between harmonious passion and innovative behavior, such that cognitive absorption and OBSE are the mechanisms through which harmonious passion relates to innovative behavior. More generally, this suggests that employees with harmonious

passion tend to experience a heightened cognitive state, expending greater quantities and intensity of cognitive energy into their work, and that it is this cognitive state of engagement that ultimately translates passion into innovative behavior.

Over a decade ago, Brockner (1988) argued that psychological states evoked by the treatment individuals experience are more proximal antecedents of self-esteem at work than contextual factors, and that reflected appraisal is "perhaps the most straightforward process mediating employees' self-esteem". The findings support this view.

While harmonious passion was positively related to both absorption and OBSE, an unanticipated finding was that obsessive passion was not negatively related to absorption. Originally, the author predicted that because obsessively passionate people tend to experience a rigid and conflicted form of job pursuit, they would be distracted by other conflicting roles and, thus, are less likely to become cognitively absorbed compared to people without such obsessive passion. However, the fact that this relationship was not found suggests that absorption is of such an intense nature that the mere absence of obsessive passion would not necessarily result in greater absorption.

Managerial implications

Several implications for managerial practice can be drawn from this research. First, employees' positive self-regard is now considered an essential building block in human-resource-based competitive strategies, and OBSE has been associated with such key outcomes as job satisfaction, organizational commitment, and performance (Pierce, 1997; Pierce and Gardner, 2004). Findings from this study suggest that improving OBSE is

important to innovation.

Korman (2001) noted that in mechanistically designed social systems people tend to develop low levels of self-esteem. Mechanistic organizations achieve a high level of system-imposed control through a division of labor, rigid hierarchy, centralization, standardization, and formalization. Such social system structuring promotes the development of belief systems that are consonant with the inherent mistrust in the abilities and willingness of people to self-regulate.

Building upon Korman's work, Pierce and Gardner (2004) theorized that any form of system-imposed behavior control, or external control system, carries with it an assumption about the incapability of individuals to self-direct and self-regulate. One consequence of a highly structured and controlled system is likely to be the suggestion to employees that they are not competent within the organizational context.

By way of contrast, complex job designs, non-routine technologies, organically designed and high involvement social systems lead to higher levels of self-esteem because they are less structured, tend to see people as a valuable organizational 'resource' and provide them with greater opportunities to self-regulate and express themselves in their organizational roles. It could be argued that as work environment structure decreases and personal control increases, people will come to see themselves as capable of independent action and thereby develop a sense of self-worth consistent and do more innovative behaviors with that personal image. At the same time, this observation is also consistent with Brockner's (1988) notions about behavioral plasticity.

The results imply that in order for people to become absorbed and innovative at work, they need to pursue some strategy of providing workers with positive feedback, based on findings deriving from cognitive evaluation theory (Ho et al., 2011). This body of research has shown that positive feedback that is unanticipated and is an indicator of one's competence would enhance the employee's valuation of the job, implying that it would enhance harmonious passion. However, if positive feedback comes to be an expected outcome of the employee's job and a focal reason for the employee to continue doing well, this could instead lead to a pressured internalization of the job and, in turn, the development of obsessive passion, where the job becomes valued not because of its inherent characteristics but because of outcomes and rewards attached to it. Hence, while the provision of positive feedback is a potentially effective strategy in developing employees' passion for their jobs, the author counsel against its indiscriminate and excessive use.

Limitations of the study

The contributions discussed previously should be interpreted in light of this study's limitations. First, there

are a number of boundary conditions that limit the applicability of this result, perhaps most importantly, the culturally bounded view of passion and innovative behavior that implicitly underlies this model. This research conducted in the PRC rather than in one of the Western countries (such as the U.S.). These cultural roles and differences can influence the overall lever of innovative behavior within a society; it may be that different results would be obtained in different countries (Wang et al., 2010). Thus, the conclusions established in the study should be interpreted with care when establishing generalizations.

Second, the links in the theoretical model follow the hypothesized causal order, with harmonious passion and obsessive passion affecting OBSE and cognitive absorption, which lead to innovative behavior. The cross-sectional research design used, however, limited the ability to determine causality. It is possible, for example, that the relationships between some distal variables and innovative behavior are reciprocal. For instance, harmonious and obsessive passions affect an employee's innovative behavior as theorized in this model. Yet at the same time, a person's innovativeness might also influence her or his harmonious and obsessive passion level in the future, which in turn will affect future innovative behavior from this employee. The author strongly recommends future studies that use longitudinal designs to explore the relationships posited in the model and these possible reciprocal relationships.

This study is the first attempt to directly theorize and test passion associated with employee innovative behavior. Future studies are also recommended to extend the research. For example, individual innovation can be viewed in terms of different stages, such as idea generation, promotion, and implementation; different levels, including incremental versus radical; and different types, such as technical versus administrative. The author hopes this study will stimulate more theory building and testing to investigate the relationship between passion and innovative behavior.

REFERENCES

- Amiot CE, Vallerand RJ, Blanchard C (2006). Passion and psychological adjustment: a test of the person-environment fit hypothesis. *Pers. Soc. Psychol. Bull.* 32:220-229.
- Baum JR, Locke EA, Smith KG (2001). A multidimensional model of venture growth. *Acad. Manage. J.* 44:292-303.
- Bowden T (2002). An investigation into psychological predictors of work family conflict and turnover intention in an organizational context. Working Paper, University of Kent, Canterbury, UK. pp.1-14.
- Brockner J (1988). *Self-esteem at work: Theory, research, and practice.* Lexington, MA: Lexington Books. pp.159-163.
- Bunce D, West MA (1995). Self perceptions and perceptions of group climate as predictors of individual innovation at work. *J. Appl. Psychol. Int. Rev.* 44:199-215.
- Cardon MS, Wincent J, Singh J, Drnovsek M (2009). The Nature And Experience Of Entrepreneurial Passion. *Acad. Manage. Rev.* 34(3):511-532.
- Drazin R, Glynn MA, Kazanjian RK (1999). Multilevel theorizing about creativity in organizations: A sensemaking perspective. *Acad.*

- Manage. J. 24(2):286–307.
- Elloy DF, Randolph A (1997). The effect of superleader behavior on autonomous work groups in a government operated railway service. *Public Pers. Manage.* 26(2):257–272.
- Heck AK, Bedeian AG, Day DV (2005). Mountains out of molehills? Tests of the mediating effects of self-esteem in predicting work place complaining. *J. Appl. Soc. Psychol.* 35(11):2262–2289
- Ho VT, Wong SS (2011). A Tale of Passion: Linking Job Passion and Cognitive Engagement to Employee Work Performance. *J. Manage. Stud.* 48(1):26-47.
- Korman AK (2001). Self-enhancement and self-protection: Toward a theory of work motivation. In M. Erez, U. Kleinbeck, & H. Thierry (Eds.), *Work motivation in the context of a globalizing economy*: Mahwah, NJ: Lawrence Erlbaum Associates, Inc, pp. 121–130.
- Linn Van Dyne LV, Don Yandewalle D, Tatiana Kostova, Latham ME, Cummings LL (2000). Collectivism, propensity to trust and self-esteem as predictors of organizational citizenship in a non-work setting. *J. Org. Behav.* 21:3-23.
- McAllister WK (1953). Toward a Re-Examination of Psychological Hedonism. *Philos. Phenomenol. Res.* 13:499–505.
- McAllister DJ, Bigley GA (2002). Work context and the definition of self: how organizational care influences organization-based self-esteem. *Acad. Manage. J.* 45(5):894-904.
- Oldham GR, Cummings A (1996). Employee creativity: Personal and contextual factors at work. *Acad. Manage. J.* 39:607–634.
- Pierce JL (1997). Self within the employee ownership context. Paper presented at the annual meeting of the Administrative Science Association of Canada, St. Johns, Newfoundland.
- Pierce Jon L, Gardner, Donald G (2004). Self-Esteem Within the Work and Organizational Context: A Review of the Organization-Based Self-Esteem Literature. *J. Manage.* 30(5):591–622.
- Rothbard NP (2001). Enriching or depleting? The dynamics of engagement in work and family roles. *Adminis. Sci. Quart.* 46:655–684.
- Schaufeli WB, Salanova M, Gonzalez-Roma V, Bakker AB (2002). The measurement of engagement and burnout: a two sample confirmatory factor analytic approach. *J. Happiness Studies* 3:71–92.
- Schindehutte M, Morris M, Allen J (2006). Beyond Achievement: Entrepreneurship as Extreme Experience. *Small Bus. Econ.* 27(4-5):349-368.
- Scott SG, Bruce RA (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Acad. Manage. J.* 37:580–607.
- Shepherd DA, MS Cardon (2009). Negative Emotional Reactions to Project Failure and the Self-Compassion to Learn from the Experience. *J. Manage. Stud.* 46(6):923-949.
- Staehele-Moody CM (1998). Adaptation to organizational change: A study of middle managers' coping styles and their correlates. *Dissertation Abstracts International: Section B: Sci. Engineer.* 59(5-B):2471.
- Tortoriello M, Krackhardt D (2010). Activating cross-boundary knowledge: The role of simmelian ties in the generation of innovations. *Acad. Manage. J.* 53(1):167-181.
- Unsworth KL, Clegg CW (2010). Why do employees undertake creative action? *British Psychol. Soc.* 83:77-99.
- Vallerand RJ, Blanchard C, Mageau GA, Koestner R, Ratelle C, Léonard M, Gagné M, Marsolais J (2003). Les passions de l'âme: on obsessive and harmonious passion. *J. Personality Soc. Psychol.* 85:756–767.
- Vallerand RJ, Houffort N (2003). Passion at work: toward a new conceptualization. In Skarlicki D, Gilliland S, Steiner D (Eds). *Emerging Perspectives on Values in Organizations*. Greenwich, CT: Information Age Publishing, pp. 175–204.
- Vecchio RP (2000). Negative emotion in the workplace: Employee jealousy and envy. *Int. J. Stress Manage.* 7(3):161–179.
- Wang DX, Xue HJ, Su HJ (2010). Influence of work support on employee creativity: an empirical examination in the Peoples Republic of China. *Afr. J. Bus. Manage.* 4(8):1546-1553.
- Yuan F, Woodman RW (2010). Innovative Behavior In The Workplace: The Role Of Performance And Image Outcome Expectations. *Acad. Manage. J.* 53(2):323-342.