DARK SIDE OF PERSONALITY AND INNOVATION WITH IT

Research in Progress

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Abstract

Post-adoption system use is an important factor for realization of the full benefits of information systems. It is thus important to understand users' innovation with IT. This research attempts to explain how an IT end user's "moving against people" personality influences innovation in system use in the work system context. Dark side of personality traits research remains understudied and misunderstood, so we challenge the long-lasting biased negative view of dark side of personality and clarify its possible beneficial role in innovation with IT. Based on creativity literature, we develop a research model. The model depicts that innovation of system use is influenced by the user's personal factors, namely moving against people" trait and innovative cognitive style, the environmental factors, namely job autonomy and work strain and their interactions. We plan to conduct an empirical study to test the hypotheses.

Keywords: Dark side of personality, Moving against people, Trying to innovate, Post adoption use

Introduction

Individual users' post-adoption system use attracts more and more attention in the information system (IS) literature (Burton-Jones and Straub Jr, 2006, Ahuja and Thatcher, 2005, Jasperson et al., 2005, Hsieh et al., 2011, Sun, 2012). Acceptance of an information system doesn't guarantee realization of the full benefits of this system because people may under-utilize it (Jasperson et al., 2005). Post-adoption use innovation behaviors can facilitate the harvest of information systems' full potential(Barki et al., 2007, Boudreau and Robey, 2005). Innovative system use can lead to optimal use of the system (Jasperson et al., 2005) and enhance task performance (Sun, 2012).

Different from prior research that has focused on positive personal factors (e.g., personal innovativeness in the domain of information technology (PIIT)), this research refers to the dark side of personality perspective. The term, "dark side," of personality was devised to assess common dysfunctional human behaviors in the workplace (Hogan et al. 2001). Since dark side of personality is typically interpreted as a set of dysfunctional traits, researchers have assumed that they will lead to negative interpersonal work relationships and extreme behaviors that derail and reduce job performance (Furnham and Taylor, 2004, Moscoso and Salgado, 2004, Hogan and Hogan, 2001).

Nevertheless, some recent research suggest that employees who are customarily difficult to work with because of anti-social personality may be creative (Burch, 2006). Zibarras et al. (2008) empirically validated that "moving against people" (MAP) —an aspect of dark side personality— has positive impact on creativity. However, they didn't elaborate on the mechanism through which MAP led to innovation. As a consequence, our overarching research question becomes: ***How can an IT end user's "moving against people" personality influences users' innovation in system use?***

This research refers to the creativity literature to explain the influence of MAP on IT end user's trying to innovate with information system behaviour. Trying to innovate is an IT end user's behavior to find new usages of existing information system(Ahuja and Thatcher, 2005). Because creativity is to develop novel, potentially useful ideas (Amabile et al., 1996), creativity literature can be employed to study

the relationship between "moving against people" aspect of dark side personality and trying to innovate behavior as dependent variable in post adoption stage. Our research model delineates that innovation of system use is influenced by the user's personal factors (e.g., MAP and innovative cognitive style), the environmental factors (e.g., job autonomy and work strain), as well as their interactions.

This research contributes to IS research in several ways. First, this research introduces MAP to post-adoption system use research. We study how to induct innovative system use behaviour from a novel perspective of 'dark side' of personality. Second, we challenge the existing one-sided assumption about dark side of personality. The research model developed in this research extends Zibarras et al.'s (2008) work by developing a more fine-grained understanding of dark side of personality's possible beneficial impact on innovation with IT.

Literature review

2.1 Dark side of personality

The term, 'dark side' of personality, as its name implies, is negatively connotated traits and devised to assess common dysfunctional human behaviors in the workplace. Dark side of personality could damage a person's reputation, impair interpersonal relationships at work, and therefore derail employee's career (Hogan and Hogan, 2001, Moscoso and Salgado, 2004, Furnham and Taylor, 2004). Dark side of personality is not simply the reverse side of normal personality, because "each of the traits also has a unique pattern of relationships with the remaining Big Five traits" (Spain et al., 2014, p. 45). Furthermore, in working place, it is more likely for individual to present dysfunctional tendencies than leisure time (Hogan et al. 2001).

The Hogan Development Survey (HDS) (Hogan and Hogan, 2009) is designed and developed to allow for a dimensional approach to the research of dark side of personality. The HDS is composed of 11 scales and each dimension measures one type of dysfunctional dispositions in the workplace. The 11 scales can be subsequently classified into three categories: moving away from people, moving against people (MAP) and moving towards people (Hogan and Hogan, 2009). Each category corresponds to Horney (1991)'s flawed interpersonal tendency model's themes. In particular, they are three categories of coping strategies to manage insecurities, which are classified based on ten 'neurotic needs'. They may co-exist in the same person (Horney, 1991). MAP reflects individual who is competitive, over-confident, and moves against others through intimidation and manipulation (Hogan and Hogan, 2009). It has four dimensions: bold, mischievous, colourful, and imaginative (Table 1). In this research, we focus on MAP because its potentially beneficial impact on creativity.

MAP disposition of people would desperately satisfy their five "psychotic needs" against all odds: (1) bending wills to achieve power or control over others, (2) exploitation of others to excel all others (3) achieving social recognition, fame and prestige (4) achieving others' admirations and (5) attaining personal achievement. There is no doubt virtually every person desires to be valued, seek power and exert influence on peers to some extent, but an individual with MAP is desperate for aforementioned accomplishments. For example, the need of exploiting other people will stimulate MAP people to surpass others, with the belief that it is normal to succeed at the expense of peers.

Personality	Definition
Bold	Unusually self-confident; feelings entitlement; over-evaluation of one's capabilities.
Mischievous	Enjoying risk taking and testing the limits; needing excitement; deceitful and exploitative.
Colorful	Expressive, animated, and dramatic; wanting to be noticed and to be the center of attention.
Imaginative	Acting and thinking in creative and sometimes odd or unusual ways.

Table 1.   The four Hogan Development Survey (HDS) dimensions regarding moving against people aspect.

The extant research about personality trait is primarily relying on dominant paradigms such as Big Five (i.e., normal personality characteristics). Although prior research has paid attention to some dimensions dark side of personality traits, the study of this perspective still remains understudied and relatively misunderstood. Nearly all extant studies assume dark side of personality has negative impact on employee's behavior and performance (e.g., Furnham and Taylor, 2004, Moscoso and Salgado, 2004, Hogan and Hogan, 2001, Burch, 2006, Goldman, 2006). The rationale is that dark side personalities may interfere with and even derail regular work.

Interestingly, a handful of recent studies discovered some dimensions of dysfunctional personalities can be counter-intuitively beneficial. For instance, Hogan et al. 2001 found that empirically the bold (narcissistic) personality was a determinant of leadership behavior, which conflicted with Resick et al.'s (2009) hypothesis. Zibarras et al. (2008) validated that there is significantly positive relationship between "moving against people" tendency and innovative characteristics. Thus, they concluded that some dysfunctional traits, in union forming the second-order HDS factor 'moving against people', actually can be viewed as innovation potentials.

2.2 An interactionist approach to studying IT end user's creativity

Creativity is defined as the development of novel, potentially useful and helpful ideas about products, practices, services or procedures to the organization (Amabile et al., 1996). Based on Shalley et al.'s (2004) review article we identify important factors that enhance or restrict creativity so we posit creativity is a function of the employee's personal characteristics (e.g., personal traits and cognitive styles), the environmental characteristics, and their interactions. We derive our argument from earlier theory in the creativity literature centering upon the interaction between personal and context (e.g., Amabile et al., 1996; Shalley et al., 2004; Zhou and Shalley, 2003). From the broader literature, person-environment fit provides theoretical support to this argument (Kristof, 1996). The rationale is that the match between person and environment contributes to positive outcomes, such as satisfaction, elevated performance and overall well-being (Schulte et al., 2009).

With respect of personality's influence in creativity research, most of the early work (e.g., Amabile et al., 1996, Zhou, 2003) adopted either Creative Personality Scale (CPS) (Gough, 1979) or the Five Factor Model of personality (Big Five) (Costa Jr and McCrae, 1992). Only few studies (e.g., Zibarras et al. 2008) have studied the potential favourable impacts of MAP on innovative behavior. The similar behaviour patterns between dysfunctional traits and creativity, including rejecting rules, impulsive and careless lead to the positive association (Eysenck, 1995, Eysenck, 1993).

Prior research suggests that an individual's cognitive style is able to directly affect creativity (Amabile et al., 1996). One of the most popular theories of understanding and measuring cognitive style is called Kirton Adaption-Innovation theory (KAI) (Kirton, 1976). It identified adaptor and innovator as two approaches of creative problem solving, located at opposite ends of cognitive style's bipolar continuum. According to this theory, an individual's cognitive style is ranged from high adaptation to high innovation. Adaptor (individual with adaptive cognitive style) is defined as an individual who prefer to stick to a given paradigm or incrementally improve the status quo. An innovator is who reveals a preference to radically transcending the given paradigm and taking risks of disrupting the status quo. Numerous research results already indicate an individual with innovative cognitive style tends to achieve creative outcomes than with adaptive style (Kirton and Kirton, 1994, Kwang and Rodrigues, 2002).

Contextual factor denotes the dimension of work environment that has underlying influence on an employee's creativity rather than on the individual per se (Shalley et al. 2004). Most discussions of this field has adopted an intrinsic motivation perspective to explain how contextual factors concerning a task influence individual's intrinsic motivations, which relay to affect creativity (Amabile et al., 1996). Intrinsic motivation signifies the driving force that is originated from inward interests or even enjoyment of the task per se (Ryan and Deci, 2000). Apart from direct influence on creativity, the interaction between individual's personality or cognitive style and contextual factors can promote or con-

strain the expression of a person's creative disposition in that individual disposition will not express itself in a constant way (Shalley et al. 2004).

The research model

Figure 1 depicts our conceptual research model. We examine a specific type of IT adoption behaviour as dependent variable: trying to innovate with IT (Ahuja and Thatcher, 2005). To develop our conceptual model, we apply interactionist approach to study IT end user's trying to innovate with IT behaviour. Trying to innovate with IT is defined as an IT end user's behavior to find new usages of existing workplace information technologies or information system(Ahuja and Thatcher, 2005). Aligned with the earlier study of creativity (Shalley et al., 2004), trying to innovate with IT is a function of the IT end user's personal factors, the environmental factors, and their interactions. Regarding personal factors, we focus on MAP and cognitive styles. As for environmental factors, we study job autonomy and work strain. Age, gender, education, and weekly computer usage are chosen to be control variables (Tierney and Farmer, 2002).
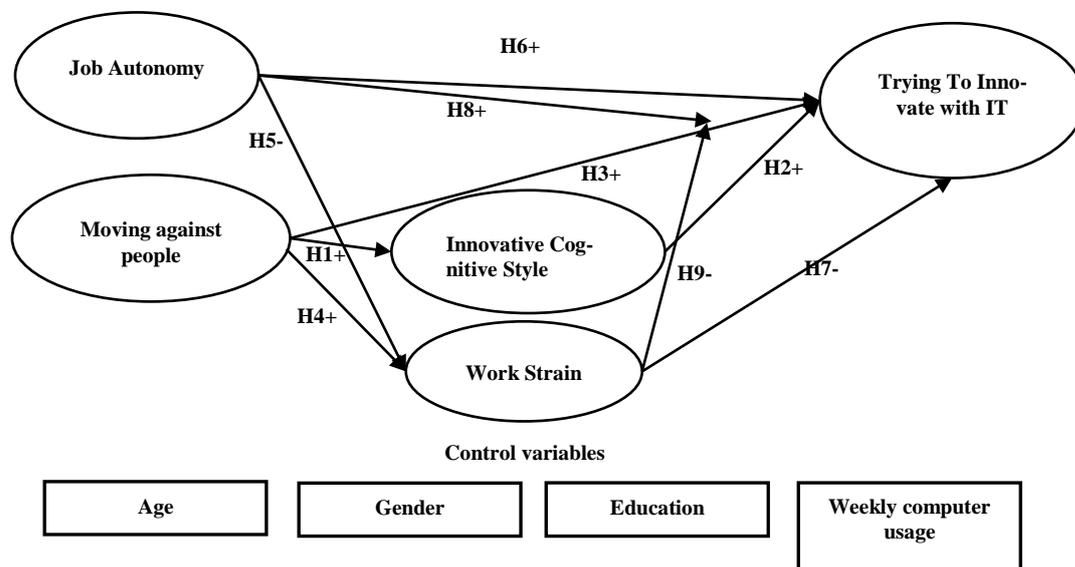

Figure 1.   Research model.

We chose those two environmental factors for the following reasons. First, environmental factors can be classified into two categories: impediments and stimulants (Zhou and Shalley, 2003, Amabile et al., 1996), so we pick up environmental factors from each category. Impediments (e.g., work strain) will restrain the expression of individual disposition; stimulants (e.g., job autonomy) will incentivize the expression process. Second, they are closely related to the noteworthy features of "moving against people" and innovative personality. Innovative people dislike demands from others (Sun, 2012) and MAP people need to desperately achieve control over others. Hence, job autonomy is the initial and necessary step to be gain control over their own tasks and avoid answering for others. As for the reason to single out work strain as one contextual factor, when an employee is involved in project he has more exposure to interpersonal contacts. The strong tendencies of MAP are to be dissatisfied by status quo, be at odds with teammates and challenge leader's authority (Horney, 1991). The disposition will provoke frequent conflicts and therefore account for emotional exhaustion or tension (Giebels and Janssen, 2005), which corresponds to the definition of work strain.

3.1   Hypotheses

End users with MAP share considerable similarities to innovators' cognitive styles because innovators are described as those who "exhibit a marked preference for tangential thinking, challenging rules and accepted procedures'' (Foxall and Bhate, 1991, p.196). In order to gain unconditional control system users with MAP tend to challenge authorities of others and hate to be bound by the established rules and norms (Horney, 1991). Normally, the above manifestations are easy to be regarded as deviant and even psychotic behaviors, but they turn out to be innovative cognitive tendencies (Runco, 2014).

Furthermore, MAP people incline to tackle problems with gusto without considering the consequences of their behaviors and achieve their goals aggressively (Horney, 1991). Those actions can be matched up with innovative cognitive style's behaviors. Prior research implies innovators are sensation-seeking, risk-taking and willing to "rock the boat" in organization (Goldsmith, 1986). Especially the people in the imaginative dimension they are characterized as being loaded with a variety of feelings, thoughts, perspectives, and ideas. When encountering the volatile circumstances, they are more adaptable to reflect on the limitations of the status quo and put forward novel ideas that challenge the status quo (McCrae and Costa Jr, 1997). The challenging behaviors are the behavioral patterns of innovative cognitive style. Thus, we posit

H1: MAP will be positively associated with innovative cognitive style.

According to Shalley et al.'s (2004) review article, individual's innovative cognitive style is a major determinant of creativity , which has been empirically confirmed by plenty of studies (e.g., Kirton and Kirton, 1994, Tierney and Farmer, 2002). Past research has shown that innovators tend to exploit computer more frequently and explore more types of software applications than those with adaptive styles (Foxall and Bhate, 1991). Thus, an IT end user's innovative cognitive style can facilitate employee's attitude and ability to assimilate a technological innovation (Gallivan, 2003), try new features of IT and innovate new ways to use IT (Logan, 1990, Pea and Kurland, 1984). Thus, we hypothesize

H2: Innovative cognitive style is positively related to trying to innovate with IT.

MAP is believed to have a direct impact above and beyond its impact through innovative cognitive style, because those end users with MAP are craving for personal admiration and personal achievement (Horney, 1991), while we propose innovative cognitive style to mediate the relationship between MAP and trying to innovate with IT. In order to be valued and admired, once the end users with MAP opt to an option according to their gusto (Horney, 1991), those users will stick to the end with perseverance. The relationships between persistence and creativity has been theoretically justified in prior study (Newell et al., 1959) because the high initiative facilitates implementing creative ideas (Frese, 2008). Therefore, once a user with MAP's interest in innovation has set in, he or she is highly likely to enforce innovative ideas until the innovations are accomplished, irrespective of his or her cognitive style.

Further, the relationship between personality traits and creativity is verified to be mediated by intrinsic motivation (Amabile et al., 1996, Zhou, 1998). The five "psychotic needs" of MAP all belong to intrinsic motivation, because intrinsic motivation signifies the driving force that is originated from inward interests (Ryan and Deci, 2000). Intrinsic motivation is theoretically illustrated to be positively associated with creativity (Amabile et al., 1996), regardless of which cognitive style end user owns. Therefore, we hypothesize that

H3: MAP is positively related to trying to innovate with IT.

Work strain is defined as the extent to which a user conflicts, argues, and causes tension with co-workers or supervisors in his or her work group (Van Dyne et al., 2002). Work strain is one type of occupational stress and can be greatly intensified, especially when the focal end user is in the profile of moving against people. At times, every end user is responsible for one part of project and eventually will collaborate with colleagues to finish the project. Hence, the interpersonal contacts with co-workers are inevitable. Due to MAP's tendency when associating with others, he or she has desperate needs to achieve power for final say and exert control over colleagues (Horney, 1991). Since job au-

tonomy and discretion are proved to reduce stress and conflicts (Thompson and Prottas, 2006), the attempt to deprive colleagues' controls therefore will exacerbate work conflicts and stress.

What's more, the users in MAP profile has the need of exploiting others to precede others (Horney, 1991). However, people tend to detest and avoid selfish behaviors (Yamamura and Higashi, 1992). After co-workers are aware of they are manipulated for others' goods rather than benefit themselves, there is no doubt that the conflicts and arguments will occur (Yamamura and Higashi, 1992). Worse still, provided that coworkers of the users with MAP are non-supportive, competitive, which will intensify the negative consequence of job tension and work strain (Cobb, 1976). Thus, we posit

H4: MAP is negatively related to work strain.

Job autonomy is "the degree to which the job provides substantial freedom, independence and discretion in scheduling the work and in determining the procedures to be used in carrying it out" (Hackman and Oldham, 1975, p.162). Job autonomy grants IT end users more freedom and rights to manage their own schedule and execute job tasks in their own way (Ahuja and Thatcher, 2005). Therefore, it cuts back on the chances that IT end users in 'moving against people' profile have directly interpersonal contacts with colleagues or team leader. Naturally the ensuing conflicts, aroused by their special personality traits as argued above, are correspondingly avoided, which leads to less tension and work strain (Thompson and Prottas, 2006). Thus, we posit

H5: Jo autonomy is negatively related to work strain.

Job autonomy can play a positive role in creative behavior, which is already examined and confirmed by a handful of empirical studies (e.g., Zhou, 1998). Creativity and innovation require divergent thinking and the behaviors to challenge established behavioral norms, rules and regulations (Runco, 2014). Hence, work environment is supposed to give creative user freedom or authority to try new features or try to use features in new ways (Amabile and Gryskiewicz, 1989). Thus, when end users perceive more freedom, opportunities, and control rather than limits in their work environment they are able to produce more innovative work (Grayson, 1993). On the contrary, in the absence of job autonomy, trying to innovate behavior may decline due to the restricted choices in task's features and methods to use features (Grayson, 1993, Melamed et al., 1995).

H6: Job autonomy is positively related to trying to innovate with IT.

Work strain is hypothesized to dampen creative behaviors. Strain produces rigidly routinized pattern (Farr and Ford, 1990). Workplace with too much strain is not an appropriate environment to cultivate divergent thinking, which is supported by the finding that rigid rules suppress organizational innovations (Kimberly, 1981). To be specific, conflict greatly distracts IT end user's attention when executing a complex task like trying new features (Baron, 1986). Then, creative users can no longer indulge themselves in formatting and carrying out novel ideas with their full hearts. We hypothesize

H7: Work strain will be negatively related to trying to innovate with IT.

On top of investigating these direct predictors of trying to innovate with IT, we also study the interaction effect between personal traits and contextual factors on trying to innovate behavior. We argue that in the presence of job autonomy, the relationship between MAP and trying to innovate with IT is expected to be stronger. IT end user with high score in MAP feel comfortable about the environment with job autonomy because job autonomy renders them to perceive more control over the method and scheduling of their work (Amabile and Gitomer 1984). Thus, they may have more desires to respond actively to try to innovate when certain context can fit individuals' personal characteristic (Shalley et al., 2004). We posit

H8: Job autonomy will positively moderate the relationship between MAP and trying to innovate with IT.

The relationship between MAP and trying to innovate with IT is hypothesized to depend on one's level of work strain, because certain situation of an organization is likely to shape or restrict people's behaviors (Davis-Blake and Pfeffer, 1989). Individuals who are high on moving against people tendency are desperate for social recognition and personal admiration (Horney, 1991). Nonetheless, as discussed

earlier, when co-workers and supervisors cannot recognize and admire their acting styles, collision, contradict and tension are triggered. Those negative feedbacks may lower intrinsic motivation and discourage the expression of creativity (George and Zhou, 2001). We posit

H9: Work strain will negatively moderate the relationship between MAP and trying to innovate with IT.

Research methodology

We plan to conduct an online survey of Microsoft Office (hence forth MS Office) users to test the hypotheses (see table 2). Prior research has demonstrated there is a legit reason to select MS office as a technological context (Sun, 2012). The MS Office suite contains Word, Excel, Power Point, Outlook, and FrontPage, among others so the abundant supply of features make it a mature technology to test innovative behavior with IT.

Our questionnaire included demographic questions and items for measuring all the constructs appearing in our model. To collect data, college students will participate in the study to fill out our questionnaires. The adoption of college students as sample can control other potential confounding factors, such as education level, work tenure, position, work experience and so on (Ahuja and Thatcher, 2005). At the beginning of our survey, we will ask respondent whether he or she has participated in at least a team project before. Those who have no prior teamwork experience will be excluded from our data analysis.

Hogan Development Survey (HDS) (Hogan et al. 2001) is chosen to detect dark side of personality traits. HDS consists of 168 items across 11 scales where respondents are asked to `agree' or `disagree' with each item. The higher score of each dimension indicates that the participant has more tendency to display the specific kind of trait. The Kirton Adaption-Innovation inventory (KAI) (Kirton, 1976) is used to measure whether the participant's cognitive style is towards innovative end. KAI scale has 32 items ranging from "very hard=1" to "very easy=5". Overall, KAI score is produced by summing 32 items' scores and higher score indicates higher tendency towards innovative cognitive style.

With regard to two moderators' and dependent variable's scales, job autonomy measure is adapted from (Ahuja et al., 2007) using Likert-type items to reflect the feelings about the current project. Work strain is to measure the frequency of being bothered by three feelings (1=never, 4=sometimes, 7= always) (Van Dyne et al., 2002). In terms of outcome variable, trying to innovate with IT is measured by evaluating two items (Ahuja and Thatcher, 2005).

Measurement Constructs
Job Autonomy
1.   I control the content of my job.
2.   I have a lot of freedom to decide how I perform assigned tasks.
3.   I set my own schedule for completing assigned tasks.
4.   I have the authority to initiate projects at my job.
Work Strain
please indicate how frequently you are bothered by the following feelings
1.   Feeling that you get into too many arguments in your work group,
2.   Feeling that you have a lot of conflict in your work group.
3.   Feeling that you work under a great deal of tension
Trying to innovate with IT
1.   I try to find new uses of IT.
2.   I try to use IT in novel ways

Table 2.   Measurement constructs

PLS will be used to assess both the measurement model and structural model. Each construct's reliability will be measured to ensure that the score for the final reflectively measured scale exceeds .707(Chin, 1998). Besides, discriminant validity, convergent validity common method bias will be evaluated as well. Whether all hypothesized relationships are significant will be tested with control variables. In particular, to determine whether cognitive style partially mediates the relationship between MAP and trying to innovate with IT, we will formally run Sobel (1982) analysis for mediating effect of cognitive style.

Discussion

5.1 Theoretical Contributions

First, this research investigates the impact of the "moving against people" aspect of dark side personality, cognitive style and contextual factors on trying to innovate with IT behavior. We attempt to understand the potential beneficial impact of MAP on innovative behavior associated with system use. We developed a new research model based on the previous literature on the dark side personality (Hogan and Hogan, 2009) and creativity (Shalley et al., 2004). The motif of this research is that some dysfunctional personalities such as MAP may not always lead to detrimental and deviant behaviors but rather can be beneficial for IT end user to adapt to new information system.

Second, we identify relevant constructs associated with "moving against people" aspect of dark side personality and situate them in our research model. We also extend our knowledge of organization innovation by demonstrating how MAP can act as direct predictor of trying to innovate with IT behavior. The direct influence is beyond and above the effect of innovative cognitive style. Thus, we answered the call of (Shalley et al., 2004) by investigating whether cognitive style and personality make independent contributions to creativity and innovation.

Third, there is little previous research addressing the interaction effects between IT end user's dark side personality and job autonomy and work strain on creativity. We have identified two constructs (i.e. job autonomy and work stain) to study and demonstrate the interaction effect of those two moderators and dark side personality characteristics.

5.2 Research and Practical Implications

It is essential during the system implementation stage to identify crucial users who are innovative in system use and intrigue other users. Prior research suggested that such users are important for suspending the practice of old system and propelling new system diffusion (Boudreau and Robey, 2005). Prior research has explored who are more likely to be innovative in system use using personal factors. For example, users with high personal innovativeness in information technology (PIIT) are more likely to use information systems in different ways (Sun, 2012). This research suggests that we may also leverage the creativity of those who we traditionally think have "dark" side personalities.

People usually believe the presence of dark personality traits leads to deviant behaviors and poor work performance. However, "moving against people" aspect of dark side personality may actually be positively associated with innovation. Thus, especially when faced with strong resistance of new information technology system, a manager can hire or arrange more IT end users with mentioned personal characteristics in his team.

Second, "moving against people" trend is double-edged sword we argue it causes work strain while improving innovation. Upstream and downstream interventions for alleviating work strain and maximizing the benefits of "moving against people" trend can be adopted to target social norms and contextual supports for assuaging tension.

References

Ahujia, M. K., Chudoba, K. M., Kacmar, C. J., Mcknight, D. H. and J. F. George (2007). "IT road warriors: Balancing work-family conflict, job autonomy, and work overload to mitigate turnover intentions." *Mis Quarterly*, 1-17.

Ahuja, M. K. and J. B. Thatcher (2005). "Moving beyond intentions and toward the theory of trying: effects of work environment and gender on post-adoption information technology use." *MIS quarterly* 29, 427-459.

Amabile, T. M., Conti, R., Coon, H., Lazenby, J. and M. Herron (1996). "Assessing the work environment for creativity." *Academy of management journal* 39, 1154-1184.

Amabile, T. M. and N. D. Gryskiewicz (1989). "The creative environment scales: Work environment inventory." *Creativity research journal* 2, 231-253.

Barki, H., Titah, R. and C. Boffo (2007). "Information system use-related activity: An expanded behavioral conceptualization of individual-level information system use." *Information Systems Research* 18, 173-192.

Baron, R. S. (1986). "Distraction-conflict theory: Progress and problems." *Advances in experimental social psychology* 19, 1-40.

Boudreau, M. C. and D. Robey (2005). "Enacting integrated information technology: A human agency perspective." *Organization science* 16, 3-18.

Burch, G. S. J. (2006). The Creativeschizotype: Help or Hindrance to team-level innovation." *The University of Auckland Business Review* 8, 43-50.

Burton-Jones, A. and D. W. Straub Jr (2006). "Reconceptualizing system usage: An approach and empirical test." *Information systems research* 17, 228-246.

Chin, W. W. (1998). "The partial least squares approach to structural equation modeling." *Modern methods for business research* 295, 295-336.

Cobb, S. (1976). "Social support as a moderator of life stress." *Psychosomatic medicine* 38, 300-314.

Costa Jr, P. and R. R. Mccrae (1992). "Neo personality inventory–revised (neo-pi-r) and neo five-factor inventory (neo-ffi) professional manual." *Odessa, FL: Psychological Assessment Resources.*

Davis-Blake, A. and J. Pfeffer (1989). "Just a mirage: The search for dispositional effects in organizational research." *Academy of Management Review* 14, 385-400.

Eysenck, H. J. (1993). "Creativity and personality: Suggestions for a theory." *Psychological Inquiry* 4, 147-178.

Eysenck, H. J. (1995). "Creativity as a product of intelligence and personality." *International handbook of personality and intelligence.* Springer.

Farr, J. L. and C. M. Ford (1990). *Individual innovation.*

Foxall, G. R. and S. Bhate (1991). "Psychology of computer use: xix. extent of computer use-relationships with adaptive-innovative cognitivestyle and personal involvement in computing." *Perceptual and Motor Skill,* 72, 195-202.

Frese, M. (2008). "The changing nature of work." *An introduction to work and organizational psychology.* 397-413.

Furnham, A. and J. Taylor (2004). *The dark side of behaviour at work: Understanding and avoiding employees leaving, thieving, and deceiving*, Palgrave Macmillan.

Gallivan, M. J. (2003). "The influence of software developers' creative style on their attitudes to and assimilation of a software process innovation." *Information & Management* 40, 443-465.

George, J. M. and J. Zhou (2001). "When openness to experience and conscientiousness are related to creative behavior: an interactional approach." *Journal of Applied Psychology* 86, 513.

Giebels, E. and O. Janssen (2005). "Conflict stress and reduced well-being at work: The buffering effect of third-party help." *European Journal of Work and Organizational Psychology* 14, 137-155.

Goldman, A. (2006). "Personality disorders in leaders: Implications of the DSM IV-TR in assessing dysfunctional organizations." *Journal of Managerial Psychology* 21, 392-414.

Goldsmith, R. E. (1986). "Personality and adaptive-innovative problem solving." *Journal of Social Behavior & Personality*.

Gough, H. G. (1979). "A creative personality scale for the Adjective Check List." *Journal of personality and social psychology* 37, 1398.

Grayson, J. P. (1993). "Skill, autonomy, and technological change in Canada." *Work and occupations* 20, 23-45.

Hackman, J. R. and G. R. Oldham (1975). "Development of the job diagnostic survey." *Journal of Applied psychology* 60, 159.

Hogan, R. and J. Hogan (2001). "Assessing leadership: A view from the dark side." *International Journal of Selection and Assessment* 9, 40-51.

Hogan, R. And J. Hogan (2009). *Hogan development survey manual*, Hogan Assessment Systems.

Horney, K. (1991). *Neurosis and human growth: The struggle toward self-realization*, WW Norton & Company.

Hsieh, J. P.A., Rai, A. and S. X. Xu (2011). "Extracting business value from IT: A sensemaking perspective of post-adoptive use." *Management Science* 57, 2018-2039.

Jasperson, J. S., Carter, P. E. and R. W. Zmud (2005). "A comprehensive conceptualization of post-adoptive behaviors associated with information technology enabled work systems." *Mis Quarterly* 29, 525-557.

Kimberly, J. R. (1981). "Managerial innovation." *Handbook of organizational design* 1, 104.

Kirton, M. (1976). "Adaptors and innovators: A description and measure." *Journal of applied psychology* 61, 622.

Kirton, M. J. and M. J. Kirton (1994). *Adaptors and innovators: Styles of creativity and problem solving*, Routledge London.

Kristof, A. L. (1996). "Person-organization fit: An integrative review of its conceptualizations, measurement, and implications." *Personnel psychology* 49, 1-49.

Kwang, N. A. and D. Rodrigues (2002). "A Big-Five Personality Profile of the Adaptor and Innovator." *The Journal of Creative Behavior* 36, 254-268.

Logan, E. (1990). "Cognitive styles and online behavior of novice searchers." *Information Processing & Management* 26, 503-510.

Mccrae, R. R. and P. T. Costa Jr (1997). "Personality trait structure as a human universal." *American psychologist* 52, 509.

Melamed, S., Ben-Avi, I., Luz, J. and M. S. Green (1995). "Objective and subjective work monotony: Effects on job satisfaction, psychological distress, and absenteeism in blue-collar workers." *Journal of Applied Psychology* 80, 29.

Moscoso, S. and J. F. Salgado (2004). ""Dark side" personality styles as predictors of task, contextual, and job performance." *International Journal of Selection and Assessment* 12, 356-362.

Newell, A., Shaw, J. C. and H. A. Simon (1959). *The processes of creative thinking*, Rand Corporation Santa Monica, CA.

Pea, R. D. and D. M. Kurland (1984). "On the cognitive effects of learning computer programming." *New ideas in psychology* 2, 137-168.

Resick, C. J., Whitman, D. S., Weingarden, S. M. and N. J. Hiller (2009). "The bright-side and the dark-side of CEO personality: examining core self-evaluations, narcissism, transformational leadership, and strategic influence." *Journal of Applied Psychology* 94, 1365.

Runco, M. A. (2014). *Creativity: Theories and themes: Research, development, and practice*, Elsevier.

Ryan, R. M. and E. L. Deci (2000). "Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being." *American psychologist* 55, 68.

Schulte, M., Ostroff, C., Shmulyian, S. and A. Kinicki (2009). "Organizational climate configurations: relationships to collective attitudes, customer satisfaction, and financial performance." *Journal of Applied Psychology* 94, 618.

Shalley, C. E., Zhou, J. and G. R. Oldham (2004). "The effects of personal and contextual characteristics on creativity: Where should we go from here?" *Journal of management* 30, 933-958.

Sobel, M. E. (1982). "Asymptotic confidence intervals for indirect effects in structural equation models." *Sociological methodology* 13, 290-312.

Spain, S. M., Harms, P. and J. M. Lebreton (2014). "The dark side of personality at work." *Journal of Organizational Behavior* 35, S41-S60.

Sun, H. (2012). "Understanding user revisions when using information system features: adaptive system use and triggers." *MIS Quarterly* 36, 453-478.

Thompson, C. A. and D. J. Prottas (2006). "Relationships among organizational family support, job autonomy, perceived control, and employee well-being." *Journal of occupational health psychology* 11, 100.

Tierney, P. and S. M. Farmer (2002). "Creative self-efficacy: Its potential antecedents and relationship to creative performance." *Academy of Management Journal* 45, 1137-1148.

Van Dyne, L., Jehn, K. A. and A. Cummings (2002). "Differential effects of strain on two forms of work performance: individual employee sales and creativity." *Journal of Organizational Behavior* 23, 57-74.

Yamamura, N. and M. Higashi (1992). "An evolutionary theory of conflict resolution between relatives: altruism, manipulation, compromise." *Evolution*, 1236-1239.

Zhou, J. (1998). "Feedback valence, feedback style, task autonomy, and achievement orientation: Interactive effects on creative performance." *Journal of Applied Psychology* 83, 261.

Zhou, J. (2003). "When the presence of creative coworkers is related to creativity: role of supervisor close monitoring, developmental feedback, and creative personality." *Journal of Applied Psychology* 88, 413.

Zhou, J. and C. E. Shalley (2003). "Research on employee creativity: A critical review and directions for future research." *Research in personnel and human resources management* 22, 165-218.

Zibarras, L. D., Port, R. L. and S. A. Woods (2008). "Innovation and the 'Dark Side' of Personality: Dysfunctional Traits and their Relation to Self-Reported Innovative Characteristics." *The Journal of Creative Behavior* 42, 201-215.