


RESEARCH ARTICLE

Work reflection during leisure time and employee creativity: The role of psychological capital

Zhining Wang^{1*} , Lijun Meng¹, Shaohan Cai² and Ling (Alice) Jiang³

¹School of Management, China University of Mining and Technology, Xuzhou, China, ²Sprott School of Business, Carleton University, Ottawa, Canada and ³School of Business, Macau University of Science and Technology, Macau, China

*Corresponding author. Email: wzncumt@126.com

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Abstract

This paper explores the relationships among positive and negative work reflection during leisure time, psychological capital, and radical and incremental creativity. We collected data from 500 dyads of employees and their direct supervisors, and employed the structural equation model to test our research hypotheses. The results reveal that positive work reflection during leisure time is positively related to radical and incremental creativity, while negative work reflection during leisure time is negatively related to the two types of creativity. Our findings also suggest that psychological capital mediates the effects of positive and negative work reflection during leisure time on radical and incremental creativity.

Key words: work reflection during leisure time; psychological capital; employee creativity

Introduction

Work and personal lives are two important but not completely independent domains for working adults. In modern organizations, particularly those with demanding job requirements, many employees keep thinking about their job tasks, i.e., engage in *work reflection*, outside of normal office hours. They may engage in work tasks not only when they are free, but also when they are spending time with their families or friends (Meier, Cho, & Dumani, 2016). Prior studies have shown that such experiences are linked to employees' subsequent job performance (Binnewies, Sonnentag, & Mojza, 2009; Fritz & Sonnentag, 2006). Nevertheless, given its importance, we argue that it is necessary to explore whether and how work reflection during leisure time (hereafter WRLT) affects various employees' subsequent work-related outcomes. Fritz and Sonnentag (2006) have reported that different work reflection experiences could result in different effects on work performance. In the same vein, we differentiated two kinds of work reflection experiences during leisure time, namely, positive WRLT (resource-providing ones) and negative WRLT (resource-consuming ones).

To the best of our knowledge, prior studies have mainly explored the effects of WRLT on employee well-being, such as its psychological and physiological consequences (Bono, Glomb, Shen, Kim, & Koch, 2013; Clauss, Hoppe, O'Shea, Morales, Steidle, & Michel, 2018; Meier, Cho, & Dumani, 2016; Sonnentag & Fritz, 2015; van Seggelen-Damen & van Dam, 2016). However, few studies have addressed its effects on performance-related outcomes (Fritz & Sonnentag, 2005, 2006). In the current study, we attempt to fill this gap by focusing on one particular type of job performance outcome, namely, employee creativity. Such creativity is a critical factor in determining organizational innovation and competitive advantage (Acar, Tarakci, & van Knippenberg, 2019; Lu, Akinola, & Mason, 2017). Based on prior studies on work reflection and creativity (Anderson, Potočnik, & Zhou, 2014; Bono et al., 2013; Casper, Tremmel, & Sonnentag,

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2019; Clauss et al., 2018; Meier, Cho, & Dumani, 2016; Querstret & Cropley, 2012; van Seggelen-Damen & van Dam, 2016), we predict that positive WRLT exert different effects on creativity, such that positive WRLT facilitates employee creativity, while negative WRLT hinders the creativity. We study the effects of such work reflection on two types of creativity, such as radical and incremental ones, since it is both theoretically and practically important to differentiate these two creativity forms (Gilson & Madjar, 2011).

Furthermore, we intend to investigate the underlying psychological processes of how WRLT affects employee creativity. We are particularly interested in the role of psychological capital as a mediator between the two factors. Psychological capital is an individual's positive psychological state of development that comprises four positive psychological resources: self-efficacy, optimism, hope, and resilience (Luthans, Youssef, & Avolio, 2007). Prior studies have identified it as the key factor that enables employees to perform better in their jobs (Anglin, Short, Drover, Stevenson, McKenny, & Allison, 2018; Bouckenoghe, Zafar, & Raja, 2015; Carter & Youssef-Morgan, 2019; Madrid, Diaz, Leka, Leiva, & Barros, 2018; Newman, Nielsen, Smyth, Hirst, & Kennedy, 2018). We have chosen to examine the mediating role of psychological capital for two reasons. First, according to the literature of work reflection, WRLT can affect employees' work states and personal available resources (Bono et al., 2013; Clauss et al., 2018; Meier, Cho, & Dumani, 2016; Wang, Liu, Liao, Gong, Kammeyer-Mueller, & Shi, 2013). Second, the creativity process requires concrete efforts through which employees must demonstrate substantial psychological strength to persist in their course of action (Anderson, Potočník, & Zhou, 2014). Thus, psychological capital may play a critical role in mediating the relationship between WRLT and employee creativity.

In summary, we developed a conceptual model depicting the relationship among WRLT, psychological capital, and employee creativity. Furthermore, using the structural equation model (SEM), we test our research hypotheses on the data collected from 500 respondents in China. This study contributes to the literature in two ways. First, our findings demonstrate that positive and negative WRLT exert different effects on employee creativity. Second, our study offers insight into the mechanism of how WRLT affects employee creativity via psychological capital. This opens the 'black box' in the relationship between WRLT and creativity. In particular, we also contribute to the psychological capital literature by identifying positive and negative WRLT as antecedents of psychological capital.

Theory and Hypotheses

Positive and negative WRLT

Positive WRLT refers to thinking about one's positive work aspects, events, and experiences during leisure time, such as successful task accomplishment, supportive work relationships, etc. (Binnewies, Sonnentag, & Mojza, 2009; Fritz & Sonnentag, 2006). Rethinking positive events may prolong and amplify the positive feelings and consequences motivated by these events (Meier, Cho, & Dumani, 2016). Therefore, positive WRLT is generally regarded as a recovery process. Prior studies have reported that such reflection generates various psychological and affective resources, such as more positive affect, self-efficacy, vigor and joviality, and less exhaustion, burn-out, stress, and health complaints (Binnewies, Sonnentag, & Mojza, 2009; Casper, Tremmel, & Sonnentag, 2019; Clauss et al., 2018; Fritz & Sonnentag, 2005; Meier, Cho, & Dumani, 2016).

Negative WRLT refers to thinking about one's negative work aspects, events, and experiences during leisure time, which may involve failure in goal pursuit (Binnewies, Sonnentag, & Mojza, 2009; Fritz & Sonnentag, 2006). When individuals negatively reflect about work during leisure time, they may experience prolonged activation by negative events (Frone, 2015). Negative WRLT is a resource-consuming experience and may hinder individual recovery from work. Existing research has shown that WRLT may reduce personal resources, resulting in negative mood, fatigue, exhaustion, poor

sleep quality, health complaints, and emotional exhaustion (Fritz & Sonnentag, 2006; Querstret & Cropley, 2012; van Seggelen-Damen & van Dam, 2016; Wang et al., 2013).

Work reflection and employee creativity

Creativity refers to the production of novel and useful ideas about products, services, or procedures (Amabile, 1988). Arguably, creative ideas can range from ones related to minor changes to those about completely new products, services, or procedures. Accordingly, researchers have differentiated between creative works dealing with minor modifications or adaptations, and those which entail radical breakthroughs (e.g., Audia & Goncalo, 2007; Sternberg, 2006). More recently, based on the idea that creativity is the first step for innovation, Gilson and Madjar (2011) draw on innovation typology (i.e., radical and incremental innovations) from the innovation literature to differentiate two distinct types of creativity: radical and incremental. Radical creativity refers to ideas that differ substantially from an organization's existing practices; incremental creativity involves few changes in an organization's existing framework and offers only minor modifications to existing practices and products (Gilson & Madjar, 2011; Madjar, Greenberg, & Chen, 2011). In the current study, we focus on the effects of WRLT on these two types of creativity.

First, recalling positive aspects of one's job is a pleasant and desirable cognitive process, which can trigger positive affect and prolong positive consequences of these aspects (Meier, Cho, & Dumani, 2016). Positive affect is known to be a critical catalyst for employee creativity (Anderson, Potočnik, & Zhou, 2014). As such, positive WRLT may result in more creativity. During positive WRLT, employees rethink the process of performing well and focus on available resources for processing job tasks and achieving work goals (Bono et al., 2013; Clauss et al., 2018). Thus, positive WRLT enables employees to capture and integrate all kinds of work resources, such as personal domain-relevant skills, organizational support, or social relationships. These resources are critical for employees to buffer risks and uncertainty involved in radical creativity and to increase the possibility of generating radical ideas (Madjar, Greenberg, & Chen, 2011). In other words, they are essential to radical creativity. On the other hand, such resources are necessary for employees to come up with new uses for existing products (Amabile, 1988; Anderson, Potočnik, & Zhou, 2014), which are essential to incremental creativity. Based on the previous argument, we propose:

Hypothesis 1: Positive WRLT is positively related to (a) radical creativity and (b) incremental creativity.

In contrast, rethinking negative work experiences is an unpleasant and undesirable cognitive process because it prolongs exposure to the negative aspects of a job (Frone, 2015), which would be detrimental to employees' physiological and psychological health. Prior studies show that negative WRLT increases employees' perceived stress, and thus results in physiological complaints, such as impaired sleep and fatigue (Berset, Elfering, Lüthy, Lüthi, & Semmer, 2011; Fritz & Sonnentag, 2006; Querstret & Cropley, 2012). It is also related to increased alcohol use and feelings of helplessness, and diminished feelings of control and attentional capacity (Frone, 2015; Lyubomirsky, Kasri, & Zehm, 2003). These physiological and psychological conditions may prevent employees from producing creative ideas (Anderson, Potočnik, & Zhou, 2014). Specifically, both radical creativity and incremental creativity are strenuous to employees, since they have to devote time and effort to engage in creative work (Waheed & Dastgeer, 2019). Thus, it is necessary for employees to generate either radical or incremental ideas when they are in a good psychological and physiological condition. Based on this logic, negative WRLT reduces radical and incremental creativity. Thus, we propose

Hypothesis 2: Negative WRLT is negatively related to (a) radical creativity and (b) incremental creativity.

WRLT and psychological capital

Psychological capital is an individual's positive psychological state of development and is characterized by: (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; (3) making positive attributions (optimism) about succeeding now and in the future; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success (Luthans, Youssef, & Avolio, 2007). Psychological capital represents 'one's positive appraisal of circumstances and probability for success based on motivated effort and perseverance' (Luthans, Youssef, & Avolio, 2007, p. 550). Empirical findings show that psychological capital influences various employee attitudinal, behavioral, and performance outcomes, such as organizational commitment, satisfaction, organizational citizenship behavior, counterproductive behaviors, and job performance (Anglin et al., 2018; Carter & Youssef-Morgan, 2019; Madrid et al., 2018; Newman et al., 2018; Newman, Ucbasaran, Zhu, & Hirst, 2014; Wu & Nguyen, 2019).

We argue that positive WRLT may lead to psychological capital, since reflecting on positive work aspects is a resource-providing experience. First, reviewing positive work events, such as successful task accomplishment, enables individuals to experience again the sense of achievement motivated by these events, as well as to reinforce and savor these positive feelings (Jiang & Johnson, 2018). As such, positive WRLT can enhance *self-efficacy* (Luthans & Avolio, 2006). Furthermore, positive WRLT provides time and opportunities for individuals to thoroughly rethink the process of goal realization about how to design pathways, identify obstacles, and make alternative plans to overcome these obstacles (Binnewies, Sonnentag, & Mojza, 2009; Koopmann, Lanaj, Bono, & Campana, 2016). Such reflection and learning could improve their ability of designing courses of action to achieve success and to cope with potential problems, thereby increasing their *hope* level (Newman et al., 2014). Arguably, self-efficacy and hope, as results of positive WRLT, provide fundamentals for *optimism* (Luthans & Avolio, 2006). Additionally, positive WRLT allows individuals to identify available work resources (e.g., skills and supportive work relationships) rather than loss, which would help them address problems and challenges with *resilience* (Bono et al., 2013; Luthans & Avolio, 2006; Meier, Cho, & Dumani, 2016). Recall that self-efficacy, hope, optimism, and resilience are key characteristics of psychological capital. Therefore, we propose that:

Hypothesis 3: Positive WRLT is positively related to psychological capital.

We also maintain that negative WRLT may decrease psychological capital, because negatively reflecting about work is a resource-consuming experience. Negative WRLT places additional emotional and cognitive demands on the employees, depleting employees' psychological resources by prolonging exposure to the negative work events (Frone, 2015; van Seggelen-Damen & van Dam, 2016). Specifically, rethinking negative work aspects leads to individuals repeatedly accessing unfavorable thoughts and memories, such as failure, which results in negative self-evaluation (Binnewies, Sonnentag, & Mojza, 2009). Therefore, negative WRLT may reduce employees' confidence in their own job abilities and makes their thinking more pessimistic and fatalistic (Wang et al., 2013). When employees doubt whether they can effectively solve problems, they harbor fewer positive expectations for success, and their motivation to continually pursue goals and find alternative pathways would greatly decrease. Furthermore, exposure to negative events can prevent employees from building a resource pool, thus becoming a barrier for employees to bounce back from adversity. In summary, negative WRLT reduces employees' self-efficacy, hope, optimism, and resilience. Therefore, we propose

Hypothesis 4: Negative WRLT is negatively related to psychological capital.

The mediating role of psychological capital

Developing creative ideas is a process often accompanied by risk, set-back, and even failure. Thus, a positive psychological state is critical for employees involved in such a process. As such, we argue that psychological capital is conducive to employees' radical and incremental creativity. First, employees who demonstrate higher levels of psychological capital are more confident in their work capabilities. Thus, they are more prone to choose challenging tasks, invest greater efforts and motivational resources in accomplishing their goals, and persevere in the face of obstacles and difficulties, all of which further facilitates their creativity (Anderson, Potočnik, & Zhou, 2014; Luthans & Youssef-Morgan, 2017; Luthans, Youssef, & Avolio, 2007). Second, individuals with substantial psychological capital are often optimists who generally focus on favorable events in their work, and distance themselves from negative aspects of their jobs. They are likely to experience positive emotions, and to have positive expectations for problematic and stressful situations (Fredrickson, 2001; Luthans, Youssef, & Avolio, 2007). Thus, they are motivated to improve existing plans and processes, or look for breaking ways to solve problems. Third, individuals with substantial psychological capital are full of hope and thus have the willpower to pursue their own goals and create pathways for achieving goals (Baron, Franklin, & Hmieleski, 2016; Madrid et al., 2018). Therefore, they tend to look for alternative pathways when the old ones are blocked and are likely to view obstacles in their jobs as opportunities for incremental improvements or even radical changes (Hu et al., 2018; Parker, Williams, & Turner, 2006). Fourth, individuals with substantial psychological capital are not only able to overcome difficulties and steer through adversity, but also able to proactively learn new knowledge and develop relationships with others (Datu, King, & Valdez, 2018; Youssef & Luthans, 2007). Thus, they are likely to engage in analyzing information and identifying problems. Thus, we propose that

Hypothesis 5: Psychological capital is positively related to (a) radical creativity and (b) incremental creativity.

In summary, the preceding discussions suggest that positive and negative WRLT influence employees' radical creativity and incremental creativity via psychological capital. Thus, it is hypothesized that:

Hypothesis 6: Psychological capital mediates the relationships between positive WRLT and (a) radical creativity and (b) incremental creativity.

Hypothesis 7: Psychological capital mediates the relationships between negative WRLT and (a) radical creativity and (b) incremental creativity.

Method

Sample and data collection

Our sample consists of 30 companies in Jiangsu province of China. These companies are in industries such as information technology, manufacturing, insurance, and banking. We first contacted their HR directors to explain the purpose of our study, and the directors agreed to participate in our survey. We then asked the HR directors to help recruit full-time employees in their companies and provide us with these employees' and their direct supervisors' email addresses. We also requested them to ensure that all of these individuals participated in our study voluntarily. We distributed our questionnaires at two time points – at bedtime on a Sunday and at the end of the next working day (i.e., Monday). On Sunday, employees took a bedtime survey on their positive WRLT, negative WRLT, psychological capital, and demographic information. On Monday, their direct supervisors took an end-of-work survey to rate the employees' radical creativity and incremental creativity. We received a total of 608 bedtime employees surveys and 532

end-of-work supervisor surveys. After matching employees with their direct supervisors and screening for missing data and information, we received 500 usable pairs of responses. Among the 500 employees, 52.4% of respondents were male, 71.6% were 30 years old or younger, and 52.0% had bachelor's degree; the job tenure of 45.2% was 3 years or less, and 48.2% were junior staff.

Measures

Following Brislin's (1980) back-translation approach, we translated all questionnaire items, except those for psychological capital, from English to Chinese. Specifically, one researcher translated the original version (English) into Chinese, while another back-translated this Chinese version into English. Additionally, there is a Chinese version of the psychological capital scale (Luthans, Youssef, & Avolio, 2008), which we adopted for this study. All items adopted the 7-point Likert-type scale, with 1 = 'strongly disagree' and 7 = 'strongly agree.'

Positive and negative WRLT

We measured positive WRLT with the 4-item scale developed by Binnewies, Sonnentag, and Mojza (2009). A sample item is 'During leisure time, I considered the positive aspects of my job.' Cronbach's α of the scale is .77. We measured negative WRLT with another 4-item scale developed by Binnewies, Sonnentag, and Mojza (2009). A sample item is 'During leisure time, I considered the negative aspects of my job.' Cronbach's α of this scale is .73.

Psychological capital

Psychological capital was measured by the 24-item Psychological Capital Questionnaire (PCQ-24) (Luthans, Youssef, & Avolio, 2007, 2008b). Sample items include 'I believe I can deal with complex questions,' 'I think it is normal to make mistakes in study and life,' 'I believe that the situation will get better and better,' and 'I usually take stressful things at work in stride.' Since the psychological capital scale consists of scales for four subdimensions, we conducted a higher-order confirmatory factor analysis (CFA). The result showed an excellent model fit ($\chi^2[248] = 344.23$, RMSEA = .03, CFI = .98, TLI = .98, SRMR = .03). Following a number of previous studies (e.g., Agarwal & Farndale, 2017; Carter & Youssef-Morgan, 2019; Guo, Decoster, Babalola, De Schutter, Garba, & Riisla, 2018; Newman et al., 2018), we utilized the overall psychological capital score in our analyses. Cronbach's α for this scale is .93.

Radical and incremental creativity

Radical creativity was measured by using three items developed from Madjar, Greenberg, and Chen (2011). A sample item is 'Is a good source of highly creative ideas.' Cronbach's α of this scale is .74. Incremental creativity was measured by using another three items developed by Madjar, Greenberg, and Chen (2011). A sample item is 'Uses previously existing ideas or work in an appropriate new way.' Cronbach's α of the scale is .73.

Control variables

We included five control variables for our analysis. First, we controlled for employees' gender and age, which have been found to affect individual learning and creativity (Gong, Kim, Lee, & Zhu, 2013). Second, we also controlled for education level, since it may affect factors such as creative self-efficacy, domain-relevant knowledge, or expertise, which could greatly affect creativity (Amabile, 1988; Tierney & Farmer, 2002; Tierney, Farmer, & Graen, 1999). Third, we controlled for job tenure, since extant experiences in a particular field are necessary for creative success (Tierney & Farmer, 2002). Finally, research suggested that job position affected individuals' involvement in innovative activities and the generation of creative ideas (Tierney, Farmer, & Graen, 1999), thus we included job position as a control variable.

Results

Descriptive statistics and correlations

Table 1 presents descriptive statistics and bivariate correlations for all variables.

Confirmatory factor analysis

Prior to hypotheses testing, we conducted a series of CFAs to examine the validity of the five key variables in our study, by using Mplus 7.4. As shown in **Table 2**, the hypothesized five-factor model, with positive WRLT, negative WRLT, psychological capital, radical creativity, and incremental creativity, showed a good fit to the data ($\chi^2 = 183.84$, $df = 125$, RMSEA = .03, CFI = .98, TLI = .98, SRMR = .04) and was better than all the other alternative models.

Hypothesis testing

To test our research hypotheses, we ran an SEM test by using Mplus 7.4. We firstly tested a model depicting the direct relationships between positive/negative WRLT and radical/incremental creativity, in the absence of psychological capital. The model showed a good fit to data: $\chi^2(df) = 1.18$, RMSEA = .02, CFI = .99, TLI = .99, SRMR = .03. As shown in **Figure 1**, positive WRLT is positively related to radical creativity ($b = .49$, $SE = .09$, $p < .01$) and incremental creativity ($b = .30$, $SE = .08$, $p < .01$), supporting Hypothesis 1a and 1b; negative WRLT is negatively related to radical creativity ($b = -.43$, $SE = .09$, $p < .01$) and incremental creativity ($b = -.44$, $SE = .08$, $p < .01$), supporting Hypothesis 2a and 2b.

Next, we added psychological capital to the model (see **Figure 2**). The fit indexes indicate a satisfactory model fit ($\chi^2[df] = 1.16$, RMSEA = .02, CFI = .99, TLI = .99, SRMR = .03). Notably, there is little difference between the fit indexes of this model and those of the previous model for the main effects of WRLT. As shown in **Figure 2**, positive WRLT was positively related to psychological capital ($b = .41$, $SE = .06$, $p < .01$), supporting Hypothesis 3. Similarly, we found support for Hypothesis 4, with negative WRLT negatively related to psychological capital ($b = -.36$, $SE = .06$, $p < .01$). Hypothesis 5a, suggesting that psychological capital is positively related to radical creativity, was supported ($b = .54$, $SE = .14$, $p < .01$). Similarly, Hypothesis 5b, suggesting that psychological capital is positively related to incremental creativity, was also supported ($b = .57$, $SE = .13$, $p < .01$).

To test the hypothesized mediation relationship proposed by Hypothesis 6a/b and Hypothesis 7a/b, we utilized bootstrapping analyses to compute confidence intervals (CIs). The Hypothesis 6a/6b suggests that psychological capital mediates the relationship between positive WRLT and radical/incremental creativity. The analysis found that these two indirect effects were .22 ($SE = .06$, $p < .01$) and .24 ($SE = .06$, $p < .01$), respectively. Bootstrapping analysis results also showed significant indirect effects of positive WRLT on employee radical creativity and incremental creativity via psychological capital with 95% CI [.12, .37] and [.13, .37], respectively. Thus, Hypothesis 6a/6b was supported. Furthermore, **Figure 2** showed that positive WRLT was still directly related to radical creativity, after we added psychological capital as a mediator between the two constructs. As such, psychological capital partially mediates the relationship between them. In contrast, the direct linkage between positive WRLT and incremental creativity turns insignificant, with psychological capital as the mediator between the two constructs. Therefore, psychological capital fully mediates the relationship between them. We utilized the same analytical procedure to test Hypothesis 7a/b. The results indicate that psychological capital partially mediates the relationship between negative WRLT and radical creativity (indirect effect = $-.19$, $SE = .06$, 95% CI [$-.34$, $-.10$]) and incremental creativity (indirect effect = $-.21$, $SE = .06$, 95% CI [$-.34$, $-.11$]), supporting Hypothesis 7a/7b.

Table 1. Descriptive statistics and correlations

Variables	Mean	SD	1	2	3	4	5	6	7	8	9
1. Positive WRLT	4.29	.38	(.77)								
2. Negative WRLT	2.75	.37	-.39**	(.73)							
3. Psychological capital	4.32	.32	.56**	-.51**	(.93)						
4. Radical creativity	4.33	.44	.48**	-.44**	.56**	(.74)					
5. Incremental creativity	4.29	.40	.40**	-.43**	.54**	.43**	(.73)				
6. Gender	.48	.50	-.02	.01	-.03	-.03	.03	-			
7. Age	2.36	.64	-.04	-.04	.01	-.03	.08	-.10*	-		
8. Education	3.46	.76	.02	.01	.05	.04	-.01	.02	.29**	-	
9. Job tenure	2.93	1.45	-.04	-.02	.03	-.01	.08	-.14**	.68**	.13**	-
10. Job position	1.77	.91	-.03	-.04	.00	.05	.03	-.33**	.35**	-.05	.46**

Note. n = 500. α reliabilities are given in parentheses. * $p < .05$ and ** $p < .01$.

Table 2. Results of confirmatory factor analyses

Model	χ^2	df	RMSEA	CFI	TLI	SRMR
Model 1: Five-factor model	183.84	125	.03	.98	.98	.04
Model 2: Four-factor model	327.24	129	.06	.93	.92	.05
Model 3: Four-factor model	382.36	129	.06	.92	.90	.05
Model 4: Three-factor model	523.33	132	.08	.87	.85	.06
Model 5: Second-factor model	610.82	134	.08	.84	.82	.06
Model 6: One-factor model	684.01	135	.09	.82	.79	.06

Note. Model 1: hypothesized five-factor model; Model 2: positive WRLT, negative WRLT, psychological capital, radical creativity + incremental creativity; Model 3: positive WRLT + negative WRLT, psychological capital, radical creativity, incremental creativity; Model 4: positive WRLT + negative WRLT, psychological capital, radical creativity + incremental creativity; Model 5: positive WRLT + negative WRLT + psychological capital, radical creativity + incremental creativity; Model 6: combining all items.

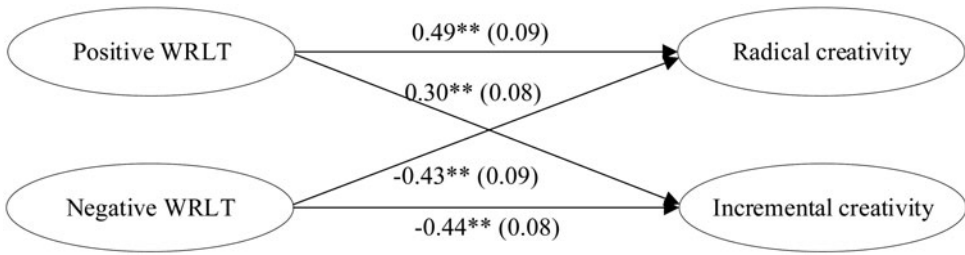


Figure 1. Estimates from SEM on relationships between WRLT and creativity

Note. Control variables are not shown for the sake of simplicity. The above path coefficients are unstandardized. WRLT: work reflection during leisure time. * $p < .05$ and ** $p < .01$

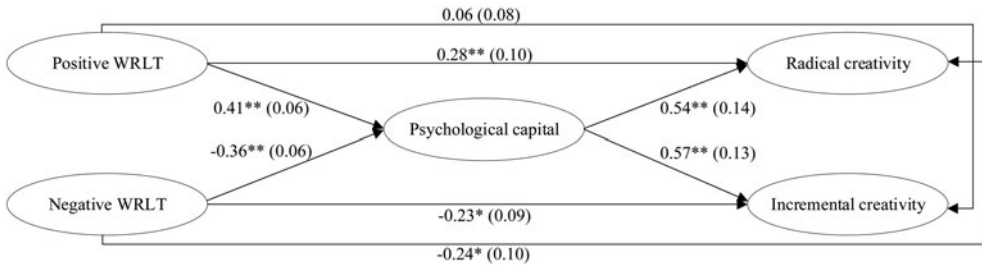


Figure 2. Estimates from SEM on the whole model

Note. Control variables are not shown for the sake of simplicity. The above path coefficients are unstandardized. WRLT: work reflection during leisure time. * $p < .05$ and ** $p < .01$

Discussion

Many employees engage in work reflection during leisure time, which affects their subsequent job performance (Binnewies, Sonnentag, & Mojza, 2009; Fritz & Sonnentag, 2006; Meier, Cho, & Dumani, 2016). In this paper, we developed and tested a theoretical model to depict whether and how WRLT affects employees’ creativity. Our empirical findings show that positive WRLT facilitates radical creativity and incremental creativity, while negative WRLT reduces the two types of creativity. This study also shows that psychological capital mediates the relationship between positive/negative WRLT and radical/incremental creativity. The results clearly support our conceptual model and provide important theoretical and practical implications.

Theoretical Contributions

This study makes theoretical contributions primarily in the following ways. First, this research enriches the literature on work reflection by exploring its effect on employee creativity. Unlike previous studies, which focuses mainly on the effects of work reflection on well-being (e.g., Casper, Tremmel, & Sonnentag, 2019; Meier, Cho, & Dumani, 2016; Wang et al., 2013), the current study discusses the effects of positive WRLT and negative WRLT on creativity and offers insight into their effects on performance-related outcomes. As such, we add to the literature on organizational outcomes of work reflection.

Second, this study sheds light on the underlying mechanism in the relationship between work reflection and creativity. Our findings reveal that psychological capital mediates the relationship between positive/negative WRLT and employee creativity. These results suggest that employees' psychological resources, such as psychological capital, may play a significant role in linking work reflection to important organizational outcomes.

Finally, we add to the literature on creativity by theoretically and empirically examining its antecedents and offering evidence that it is important to distinguish the two types of creativity (Gilson & Madjar, 2011; Jaussi & Randel, 2014; Madjar, Greenberg, & Chen, 2011; Xu, Jiang, & Walsh, 2018). Following Madjar, Greenberg, and Chen (2011), we distinguish two types of creativity – radical and incremental ones. Our results reveal that positive WRLT has a direct effect on radical creativity, in addition to indirect effect via psychological capital, whereas it only indirectly influences incremental creativity via psychological capital. This is probably because radical creativity involves set-breaking ideas, and requires a burst of inspiration (Gilson & Madjar, 2011; Madjar, Greenberg, & Chen, 2011). Positive WRLT may enable employees to gain such inspiration, thereby directly stimulating radical creativity. In contrast, incremental ideas are modifications to the existing practices, and are reflected in details of daily work (Gilson & Madjar, 2011; Madjar, Greenberg, & Chen, 2011). Thus, the influence of positive WRLT on incremental creativity is mostly realized through psychological capital, which provides employees with energy to focus on the details of daily work.

Practical implications

Our findings provide several practical implications for organizations and managers. First, we find that positive WRLT positively affects employee creativity and negative WRLT negatively influences employee creativity. This finding suggests that the effects of recalling work experiences on subsequent creativity seem to be determined by its contents, which could be positive or negative. The findings suggest that, to facilitate employee creativity, firms may need to encourage positive WRLT. They may also help employees reduce negative WRLT, thereby ensuring that employee creativity will not be deterred. Managers may promote positive WRLT by encouraging employees to write down three good things (Lanaj, Foulk, & Erez, 2019; Meier, Cho, & Dumani, 2016). They may also utilize 'three-good-things' intervention to help employees fight against the tendency to think of negative events (Meier, Cho, & Dumani, 2016).

Second, our study shows that psychological capital mediates the relationship between WRLT and employee creativity. This finding could help organizations and managers to better understand the mechanism of how work reflection affects employee creativity. Given the importance of psychological capital in promoting employee creativity, managers may design training programs to enhance employees' psychological capital. According to Luthans and Avolio (2006)'s research on psychological capital interventions, there are a number of strategies available for this purpose, such as task mastery, modeling, social persuasion and positive feedback, physiological and/or psychological arousal, goal design, pathway generation, etc. Managers may utilize these strategies to develop and enhance employees' psychological capital.

Limitations and directions for future research

This research has several limitations, which suggest meaningful future research directions. First, although we measured the independent, mediator, and dependent variables at two time points, this design is not a time-lagged one, but rather a cross-sectional design. Thus, it does not establish the directions of causality precisely for the paths in our model. Future research can utilize a longitudinal design or a controlled experiment approach to establish causality. Second, our study indicates that psychological capital partially mediated the relationship between positive WRLT and radical creativity, as well as the relationship between negative WRLT and radical/incremental creativity. These findings suggest that other variables may be at work here. We encourage future researchers to consider other mechanisms that account for these relationships. Third, we do not include factors that may moderate the linkages among WRLT, psychological capital, and creativity. Thus, future research may need to explore work conditions that influence the strength of the linkages among the three constructs. Finally, the sample of this study was collected from Mainland China. It may be necessary to test whether our findings can be generalizable to other countries in future research.

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Zhining Wang is an associate professor of the School of Management at the China University of Mining & Technology. His current research interests include knowledge management, human resource management, and strategic management of information technology. He received his PhD from the Southeast University of China in 2009. His research has appeared in scholarly journals including *Journal of Business Research*, *Journal of Intellectual Capital*, *The International Journal of Human Resource Management*, *Decision Support Systems*, *Journal of Managerial Psychology*, *Management Decision*, *Current Psychology*, *Expert Systems with Applications*, etc. He has already authored three books.

Lijun Meng is a postgraduate of the School of Management at the China University of Mining and Technology. Her current research direction is organizational behavior and human resource management. She has published in *Journal of Managerial Psychology*, *Journal of Intellectual Capital*, among others.

Shaohan Cai is a Professor of Sprott School of Business in the Carleton University of Canada. He received his Ph.D. from New Mexico State University of United States in 2003. His research has been accepted by or appeared in such journals as *Journal of Supply Chain Management*, *International Journal of Management and Enterprise Development*, *International Journal of Quality and Reliability Management*, *Asian Journal of Business Research*, *International Journal of Information Systems and Supply Chain Management*, *International Journal of Production Economics*, *Industrial Marketing Management*, *Journal of Business Research*, *Journal of Purchasing & Supply Management*, *Information & Management*, etc.

Ling (Alice) Jiang is an associate Professor, School of Business, Macau University of Science and Technology. She has published in *Journal of Business Research*, *Journal of Service Management*, *Industrial Marketing Management*, *Journal of Informetrics*, *Business Horizons*, among others.