Why and When Narcissistic Employees Are More Creative in the Workplace? A Social Cognitive Perspective

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ABSTRACT The question of whether narcissists are more creative than peers has attracted much scholarly attention in both psychology and organizational management sciences. Drawing from social cognitive theory, we theorized that the relationship between narcissism and creativity could be explained by individual creative self-efficacy, which depends on one's direct and vicarious experiences of creativity. Drawing from trait activation theory, we further proposed organizational valuing of creativity as a key contextual moderator that determines whether narcissism facilitates or inhibits creative self-efficacy and, in turn, creativity. We suggest that high organizational valuing of creativity will energize narcissists to put their attention and effort into both direct and vicarious experiences of creativity, enhancing their creative self-efficacy and creativity. We tested our conceptual model through a field study with data collected from 269 full-time employees working in 86 work teams. The empirical results provided support for the social cognitive explanation for the positive relationship between narcissism and creativity in the context of high organizational valuing of creativity. Our study not only resolved prior debates on the relationship between narcissism and creativity but also provided direct empirical support for social cognitive theory and the person-in-context interactionist perspective of creativity research.

KEYWORDS creative self-efficacy, creativity, narcissism, organizational valuing of creativity

INTRODUCTION

Narcissism, a personality trait that describes an individual who possesses 'feelings of superiority, entitlement, and a constant need for attention and admiration' (Chatterjee & Hambrick, 2007: 353), is one of the most prototypical characteristics

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of new-generation employees (Twenge & Campbell, 2008). Scholars in organizational science have put increasing amounts of attention to the behavioral consequences of narcissism (for reviews, see Campbell, Hoffman, Campbell, & Marchisio, 2011; Krizan & Herlache, 2018). Along this stream, one enduring debate concerns the relationship between narcissism and creativity – the generation of novel and useful ideas regarding work-related processes or new products (Zhou & George, 2001). Some scholars assume that narcissists are more creative than their peers because they consider creativity as a way to satisfy their strong need for uniqueness and draw others' attention (e.g., Dahmen-Wassenberg, Kämmerle, Unterrainer, & Fink, 2016; Martinsen, Arnulf, Furnham, & Lang-Ree, 2019; Raskin, 1980), which motivates narcissists to engage in creative explorations. Others argue that narcissists are not necessarily more creative (Goncalo, Flynn, & Kim, 2010) or even less creative (Jonason, Abboud, Tomé, Dummett, & Hazer, 2017) than their peers, as narcissists have an inflated ego that impedes their learning behaviors (Howes, Kausel, Jackson, & Reb, 2020).

This article responds to this theoretical debate by proposing that these seemingly conflicting views can be reconciled from a social cognitive perspective. Specifically, social cognitive theory (Bandura, 1986) suggests that employees' belief in successfully completing creative tasks and generating creative outcomes, that is, creative self-efficacy (Tierney & Farmer, 2002), is vital for the generation of individual creativity (Gong, Huang, & Farh, 2009). Additionally, individuals' creative self-efficacy can be mainly cultivated by two learning experiences (Bandura, 1977): direct experiences of creativity, which refer to individuals' learning from themselves by trying and applying their own ways to engage in creativity-related actions, and vicarious experiences of creativity, which refer to individuals' learning from others by observing their creativity-related actions. As narcissists are sensitive to self-enhancement opportunities (Morf & Rhodewalt, 2001), they may frequently engage in creative explorations as a way to satisfy their strong need for uniqueness and draw others' attention (Raskin, 1980), which could help them accumulate direct experiences of creativity. However, due to narcissists' inflated ego, their vicarious experiences of creativity may only be accumulated under high self-enhancement motivation, which is influenced by the context. Thus, we propose that the relationship between narcissism and creative self-efficacy, and in turn, creativity, depends on whether direct experiences or vicarious experiences are more salient as affected by a context that links displaying creativity with self-enhancement opportunities (Tett & Burnett, 2003).

Integrating social cognitive theory (Bandura, 1986) with trait activation theory (Tett & Burnett, 2003), we propose a theoretical model concerning how organizational valuing of creativity, which refers to an organizational climate that the organization encourages idea generation, evaluating new ideas supportively, and providing rewards and recognitions of creativity (Amabile, Conti, Coon, Lazenby, & Herron, 1996; Farmer, Tierney, & Kung-Mcintyre, 2003), affects narcissists' direct and vicarious experiences of creativity, which in turn has downward implications for their

creative self-efficacy and creativity. In the organizational context, climates in organizations serve as influential environmental cues that guide employees' interpretations of the organization's expectations and regulate and shape employees' cognitions and behaviors (Harris, 1994; Hatch, 1993). In particular, organizational valuing of creativity can send the message that displaying high creativity is desirable and valued in the company. Given that narcissists are highly sensitive to situational cues of self-enhancement opportunities (Morf & Rhodewalt, 2001), we argue that organizational valuing of creativity will energize narcissists to put their attention and effort into creative endeavors. Under high organizational valuing of creativity, narcissists will not only increase their attempt to apply new idea experiences (i.e., direct experiences of creativity) but also observe the creative actions of others (i.e., vicarious experiences of creativity). However, under low organizational valuing of creativity, narcissists will have less motivation to engage in learnings of creativity, and they can hardly learn from others due to their inflated ego. As a result, these different accumulations on direct and vicarious experiences of creativity will influence narcissists' creative self-efficacy and creativity in the workplace. The overall conceptual model is depicted in Figure 1.

We seek to make three interrelated theoretical contributions. First, our research provides new and unified insights into understanding the relationship between narcissism and creativity by theorizing and testing a social cognitive explanation. Specifically, we reconciled the seemingly controversial views on narcissists' creativity in the workplace by focusing on the crucial mechanism of creative self-efficacy resulting from their prior direct and vicarious experiences of creativity as affected by the contextual influence of organizational valuing of creativity. Second, we contribute to the narcissism literature by demonstrating that the relationships between narcissism and two types of learning experiences are different. The relationships also differed under different levels of organizational valuing of creativity. Finally, our research contributes to the person-in-context interactionist perspective in creativity research (Shalley, Zhou, & Oldham, 2004; Woodman, Sawyer, & Griffin, 1993) by demonstrating that organizational valuing of creativity is a vital context facilitating narcissists' enhanced creativity and offering an underlying mechanism based on social cognitive theory (Bandura, 1986).

THEORETICAL BACKGROUND AND HYPOTHESES

Literature Review of Narcissism and Creativity

Although the clinical approach conceptualizes narcissism as a personality disorder, the subclinical approach conceptualizes it as a personality trait that is normally distributed in the population. Following this subclinical approach, social psychologists have developed different conceptualizations of narcissism by focusing on different trait components (Campbell et al., 2011). Grandiose narcissism and vulnerable narcissism are two primary forms of narcissism conceptualized in the literature
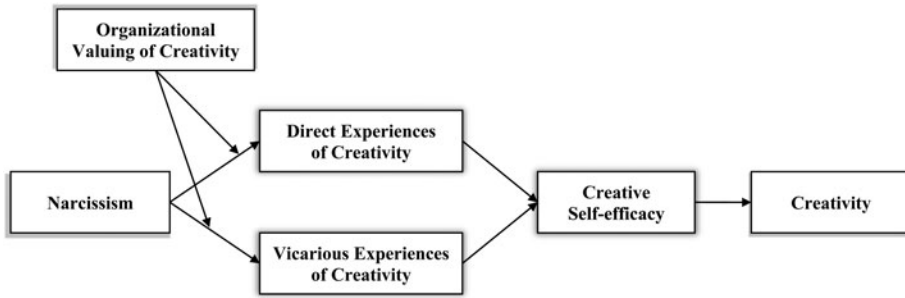
Figure 1. The theoretical model

(Miller & Campbell, 2008). Grandiose narcissism focuses on the personal attributes of self-absorption and entitlement, whereas vulnerable narcissism focuses on the personal attributes of anxiety and feelings of inferiority. Given that grandiose narcissism is associated with some positive personality features, such as attention-seeking and approach orientation, organizational research has paid more attention to grandiose narcissism than vulnerable narcissism (Campbell et al., 2011). Following prior organizational research investigating narcissism (Campbell et al., 2011; Grapsas, Brummelman, Back, & Denissen, 2020), we focus on grandiose narcissism and define it as a stable individual trait consisting of inflated self-views and grandiosity (Campbell et al., 2011).

Drawing upon these conceptualizations of narcissism, social psychology and management researchers have conducted several empirical studies (see Table 1 for a summary) to explore the relationship between narcissism and creativity. Given that generating novel and useful ideas and solutions can draw others' attention and demonstrate the focal person's uniqueness and superiority, many studies (as shown in Table 1) theorized that a positive relationship exists between narcissism and creativity (e.g., Furnham, Hughes, & Marshall, 2013; Galang, Castelo, Santos, Perlas, & Angeles, 2016; Raskin, 1980). However, other inconsistent results were also found. For example, when narcissists' creativity was not rated by themselves, narcissism was not related to creativity (Dahmen-Wassenberg et al., 2016) or even showed a negative relationship with creativity (Jonason et al., 2017). Narcissists have exaggerated self-views and tend to rate their creativity positively, which makes them display high self-rated creativity (Goncalo et al., 2010). In fact, exaggerated self-views limit narcissists' creativity by inhibiting narcissists from learning from themselves and others, as they believe that there is no need to learn for them (Howes et al., 2020; Liu, Li, Hao, & Zhang, 2019). Although the relationship between narcissism and creativity was found equivocal, prior empirical findings seem to support that narcissism is positively related to self-rated creativity (Ames, Rose, & Anderson, 2006; Goncalo et al., 2010), and the relationship between narcissism and other-rated creativity is contextually sensitive. Narcissists tend to employ self-presentational tactics to manage their impressions at work; thus, they display

Table 1. A summary of empirical research related to narcissism and creativity

Author	Sample	Country	Measurement	Main findings
Ames et al. (2006)	176 undergraduates	US	NPI-16 (Ames et al., 2006)	• There was a positive correlation between narcissism and self-evaluated creativity ($r = 0.28^{**}$).
Dahmen-Wassenberg et al. (2016)	247 undergraduates, 55% of which studied social sciences, education science, law, or engineering	Germany	NPI-40 (Raskin & Hall, 1979)	• There was a strong correlation between narcissism and self-evaluated creativity ($r = 0.45^{**}$). • Narcissism is not significantly related to other-evaluated creativity ($r = 0.02$–0.06) or objective indicators of creativity ($r = 0.03$–0.08).
Furnham et al. (2013)	A convenience sample involving 207 participants, 59% of which were undergraduate students	UK	NPI-16 (Ames et al., 2006)	• Narcissism was positively correlated to self-evaluated creativity ($r = 0.24^{**}$–0.26^{**}).
Galang et al. (2016)	Study 1: An online survey collected data from 503 participants	Filipinos	Short Dark Triad (Jones & Paulhus, 2014)	• Narcissism was positively correlated to self-evaluated creativity ($r = 0.24^{**}$).

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Table 1. Continued

Author	Sample	Country	Measurement	Main findings
Goncalo et al. (2010)	Study 1: 244 undergraduates Study 2: 76 undergraduates Study 3: 292 undergraduates studying organizational psychology	US	NPI-16 (Ames et al., 2006) (Study 1: mean = 6.74, SD = 3.11) (Study 2: mean = 5.48, SD = 2.84) (Study 3: mean = 6.79, SD = 1.67)	• Study 1: Narcissism was positively correlated to self-evaluated creativity ($r = 0.27**$) but not significantly related to objective indicators of creativity ($r = -0.17–0.08$). • Study 2: Narcissism was positively correlated to other-evaluated creativity ($r = 0.30*$), and the evaluators' impressions of the narcissists' energy and enthusiasm mediated the effect of narcissism on evaluations of creativity. However, narcissism was not significantly related to objective indicators of creativity ($r = -0.42–0.22$). • Study 3: The team average narcissism level had a positive linear effect on group creativity ($r = 1.63*$) and a negative curvilinear effect on group creativity ($r = -1.92**$). The team average narcissism level also had a negative curvilinear effect on group systematic thinking ($r = -2.27**$).
Jonason et al. (2017)	248 American MTurk workers and 154 Australian volunteers recruited through Facebook	US, Australia	Short Dark Triad (Jones & Paulhus, 2014)	• Narcissism was associated with higher self-evaluated creativity ($r = 0.28**$). • Narcissism was negatively associated with other-evaluated creativity ($r = -0.15**$).

Table 1. Continued

Author	Sample	Country	Measurement	Main findings
Jonason et al. (2015)	An online survey collected data from 226 participants through social media	US, Australia, Ireland, and UK	Short Dark Triad (Jones & Paulhus, 2014)	• Narcissism was positively correlated to self-evaluated creativity as measured by the Kaufman Domains of Creativity Scale ($r = 0.34$**) but was not significantly correlated to self-evaluated creativity as measured by the Creative Achievement Questionnaire ($r = 0.12$).
Kapoor (2015)	51 participants, approximately 59% of which were students in various disciplines, except for psychology	India	NPI-40 (Raskin & Hall, 1979)	• Narcissism was significantly correlated to self-evaluated positive-creative options ($r = 0.09$*). • Narcissism was not significantly correlated to self-evaluated negative-creative options ($r = -0.04$).
Martinsen et al. (2019)	1,375 young adults applying for officer training in the Norwegian military	Norway	NPI-37 (Emmons, 1987)	• Narcissism was significantly related to objective fluency ($r = 0.06$*) and all objective creative activity variables ($r = 0.06$*–0.18**). • Narcissism explained the unique variance in all objective creative activity factors (0.07*–0.16**), except for music ($r = 0.01$).

Table 1. Continued

Author	Sample	Country	Measurement	Main findings
Nevicka et al. (2016)	Study 2: 142 undergraduates Study 3: 159 undergraduates	Netherlands	NPI-40 (Raskin & Terry, 1988)	• When the participants received negative feedback, higher narcissism led to better other-evaluated creativity (Study 2: $r = 0.37$**; Study 3: $r = 0.21$, $p = 0.06$), and when the participants received positive feedback, higher narcissism was not related to other-evaluated creativity (Study 2: $r = -0.10$; Study 3: $r = -0.10$).
Raskin (1980)	71 undergraduates	US	NPI-81 (Raskin & Hall, 1979)	• Narcissism was positively related to self-evaluated ($r = 0.24$*) and other-evaluated creativity ($r = 0.25$*).
Smith and Webster (2018)	Study 1: 181 undergraduates in a management course Study 2: 288 employees who worked at least 20 h per week	US	Short Dark Triad (Jones & Paulhus, 2014)	• Narcissism was positively related to other-evaluated innovation via self-evaluated adaptability (Study 1: indirect effect = 0.07, 95% CI = [0.01, 0.17]; Study 2: indirect effect = 0.03, 95% CI = [0.01, 0.14]).
Solomon (1985)	Undergraduates (100)	US	Narcissistic Personality Disorder (NPD) Total Positive Scale of the Tennessee Self-Concept Scale (TSCS)	• Self-evaluated creativity as measured by the Creative Personality Scale of the Adjective Check List was negatively related to narcissism (measured by NPD, $r = -0.45$***) and positively related to narcissism (measured by TSCS, $r = 0.33$***).

Table 1. Continued

Author	Sample	Country	Measurement	Main findings
Wallace and Baumeister (2002)	Study 4: 74 introductory psychology students	US	NPI-40 (Raskin & Terry, 1988)	• Narcissism was not related to objective idea generation ($r = 0.07$). • Narcissists was significantly related to objective idea generation under the public evaluation condition but not under the no-evaluation and self-evaluation conditions
Wisse et al. (2015)	306 employees, most of whom worked in commercially oriented (service) organizations	Netherlands	Dirty Dozen scale (Jonason & Webster, 2010)	• Narcissism was positively related to leader-evaluated idea generation ($r = 0.17^*$).

Notes: *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

high creativity if they hold the belief that high creative performance can bring them good impressions. Thus, the reason for mixed findings of prior research may lie in the different research contexts that attach different self-enhancement opportunities to displaying high creativity. This is also consistent with the findings of Wallace and Baumeister (2002), which they found that narcissists only displayed higher creativity than others when they recognized their creativity would be evaluated publicly. Therefore, drawing upon and extending these prior studies, we seek to develop a social cognitive perspective to obtain an understanding of the narcissism–creativity relationship and propose a critical boundary condition of organizational valuing of creativity by integrating trait activation theory.

Two Learning Processes of Individuals' Creative Explorations

Social cognitive theory (Bandura, 1986) posits that individual behavior occurs in social environments. It is jointly determined by individual factors and environmental factors through a social learning and personal agency process. Through interacting with others, individuals can learn about the appropriateness and usefulness of specific behaviors. They will try to do these behaviors by themselves or vicariously learn from observing other role models (Bandura, 1977). In this process, individuals accumulate direct experiences, which refer to individuals' learning from themselves by trying and applying their own ways to engage in task-related actions, and vicarious experiences, which refer to individuals' learning from others by observing their task-related actions. The rewards and punishments of past direct experience can convey information whether individuals are performing well or inappropriately, which motivates them to learn and perform those rewarded behaviors and avoid punished behavior. In addition, individuals' learning can also occur vicariously through paying attention to other role models, cognitively processing the role models' information, and being motivated to engage in the role models' behavior (Bandura, 1986). These two learning experiences are vital for the cultivation of self-efficacy and completion of a given task (Bandura, 1997). According to social cognitive theory, individuals are agentic operators that are motivated to act in accordance with their beliefs about their capabilities and the expected outcomes of actions. Individuals with high self-efficacy in a task are more likely to expend effort on this task and persist longer when they encounter obstacles, which can help them complete the task successfully (Bandura, 1986).

Narcissists' Direct Experiences of Creativity

Narcissists have a high need in displaying their superiority and possess inflated self-views, which influence their direct learning experiences on creativity. In the organizational context, employees usually admire and value those who possess the abilities and skills necessary to generate creative ideas and solutions to work-

related problems. As directly noted by Perry-Smith and Shalley (2003: 99), 'creativity will help a relatively unknown person become known to a much larger number of people'. Therefore, displaying high levels of creativity is a way for narcissists' self-enhancement (Chen, Li, Chen, & Ou, 2018; Zhou, Wang, Bavato, Tasselli, & Wu, 2019), and narcissists may proactively try and apply new ideas to their work to satisfy their need to draw others' attention and admiration. Although creativity-related activities may also contain potential risks, narcissists' overconfidence can make them ignore these risks and put their attention to the potential side of creativity (i.e., getting attention and admiration). Thus, we propose:

Hypothesis 1: Narcissism is positively related to direct experiences of creativity.

According to trait activation theory (Tett & Burnett, 2003: 502), 'personality traits are expressed as responses to trait-relevant situational cues'. The situations trigger personality traits that 'sleep' residing in the individual, which makes individuals engage in trait-related behaviors. Thus, individuals' personality will manifest different behaviors across different situations. For example, the context of organizational injustice activates narcissistic leaders' self-enhancement motivation, which further increases their self-interested behaviors (Liu, Chiang, Fehr, Xu, & Wang, 2017). In addition, high reward interdependent team settings were also found to activate narcissistic individuals' self-enhancement motivation, increasing their performance (Nevicka, De Hoogh, Van Vianen, Beersma, & McIlwain, 2011). These findings are all consistent with trait activation theory, which indicates that the effects of narcissism on learning behaviors depend on situational cues of self-enhancement opportunities.

By integrating trait activation theory (Tett & Burnett, 2003) and social cognitive theory (Bandura, 1986), we propose a moderating role of organizational valuing of creativity on the relationship between narcissism and direct learning behaviors on creativity. Narcissists have a constant need for self-enhancement, and they are highly sensitive to situational cues of self-enhancement opportunities (Morf & Rhodewalt, 2001). When the organization encourages idea generation, evaluates new ideas supportively, and provides rewards and recognitions of creativity, employees may anticipate that engaging in creativity-related activities can receive organizations' attention and rewards. Under high organizational valuing of creativity, they judge that displaying high creativity at work could help them receive a superior image. Although creativity-related activities may also contain potential risks, narcissists' overconfidence can make them ignore these risks and put their attention to the potential side of creativity (i.e., displaying their superiority). When narcissists perceived displaying high creativity as an instrumental way for self-enhancement, they devoted large efforts to preparations and experiments with new ideas. Narcissists will not only try new ways of doing their tasks but also adopt trial-and-error approaches to learn and generate new ideas. In contrast,

when the organization does not encourage idea generation or provides no rewards and recognitions of creativity, narcissists will perceive less meaningfulness in engaging in creativity, making them have insufficient motivation to prepare for creative activities. Thus, we propose

> *Hypothesis 2: Organizational valuing of creativity moderates the relationship between narcissism and direct experiences of creativity, such that the relationship will be positive when organizational valuing of creativity is higher and will not exist when organizational valuing of creativity is lower.*

Narcissists' Vicarious Experiences of Creativity

Because narcissism involves a hybrid of personal traits that may cause different behavioral tendencies, narcissists are likely to display different learning behaviors on creativity in the workplace. In particular, although narcissists will have more direct experiences of creativity due to the general perceptions that displaying creativity can attract others' admiration, we do not expect their vicarious experiences to be too high. On the one hand, narcissists are highly sensitive to information that may threaten their high self-esteem. Learning from others harms their inflated positive self-views as it indicates a lower competence than others. On the other hand, narcissists' overconfidence makes them hold the belief that there is no need to learn from others for themselves. Therefore, we expect that narcissists' vicarious experiences of creativity depend on the organizational valuing of creativity, which influences narcissists' perceptions of the strength of the relationship between displaying high creativity and self-enhancement opportunities.

High organizational valuing of creativity can draw individuals' attention to achieving creative performance, especially for narcissists who are strongly motivated to demonstrate their superiority and uniqueness (Emmons, 1987). Under high organizational valuing of creativity, narcissists may have high levels of self-enhancement motivation on their creative performance. They will perceive that displaying high creativity can bring them admiration and anticipate that displaying low creativity is threatening. Compared to learning from others, failing to display high creativity may be more threatened. Thus, narcissists may increase their vicarious experiences of creativity to prevent them from losing out to others in creativity. In contrast, low organizational valuing of creativity cannot activate narcissists' self-enhancement motivation on displaying high creativity. As narcissists have high motivation to maintain their positive self-view and are overconfident in their ability, they are less likely to learn from others by observing their creative actions without a creativity-valued context. Thus, we propose:

> *Hypothesis 3: Organizational valuing of creativity moderates the relationship between narcissism and vicarious experiences of creativity, such that the relationship will be positive when*

organizational valuing of creativity is higher and will be negative when organizational valuing of creativity is lower.

Implications for Creative Self-efficacy and Creativity

Social cognitive theory (Bandura, 1986) posits that individual self-efficacy is cultivated not only through one's direct learning experiences (i.e., direct experiences) but also by observing the actions of others (i.e., vicarious experiences). Thus, we theorize that both employees' direct and vicarious experiences on creative activities are beneficial to their creative self-efficacy (Tierney & Farmer, 2002), which will enhance creativity. Specifically, when employees try new ways of doing their tasks and adopt trial-and-error approaches to learn and generate new ideas, they can accumulate rules and strategies for conducting creative activities, which enhance their beliefs of personal efficacy on generating novel and useful ideas at work. In addition, employees can also acquire knowledge (e.g., skills and strategies) by observing the creative actions of others (Bandura, 1997). More importantly, individuals often appraise their capabilities based on the attainment of similar others (Bandura, 1977, 1997). When employees observe coworkers' creative ways of doing tasks and novel ideas at work, their creative self-efficacy will increase. These two kinds of experiences with creativity can enhance individual creativity through creative self-efficacy.

By integrating trait activation theory (Tett & Burnett, 2003) and social cognitive theory (Bandura, 1986), we propose a theoretical model linking the interaction of narcissism and organizational valuing of creativity to employee creativity. Under high organizational valuing of creativity, narcissists perceive that displaying high creativity can bring them attention and admiration. Driven by their self-enhancement motives, narcissists not only increase their own attempt to apply new idea experiences (i.e., direct experiences of creativity) but also learn from others' creativity-related experiences (i.e., vicarious experiences of creativity). In contrast, under low organizational valuing of creativity, narcissists have less motivation to prepare for creative activities and observe others' creative ways of doing tasks and novel ideas at work. Worse, narcissists' self-protection motives inhibit them from learning from others' creativity-related experiences when the organization does not value creativity. Taken together, we argue that narcissism and organizational valuing of creativity will interact with narcissists' experiences of creativity (i.e., direct and vicarious experiences of creativity), which, in turn, influence their creative self-efficacy and creativity sequentially. Thus, we propose:

Hypothesis 4a: Organizational valuing of creativity moderates the indirect relationship between narcissism and creativity via direct experiences of creativity and creative self-efficacy, such that the indirect relationship will be positive when organizational valuing of creativity is higher and will not exist when organizational valuing of creativity is lower.

Hypothesis 4b: Organizational valuing of creativity moderates the indirect relationship between narcissism and creativity via vicarious experiences of creativity and creative self-efficacy, such that the indirect relationship will be positive when organizational valuing of creativity is higher and will be negative when organizational valuing of creativity is lower.

METHODS

Sample and Procedures

We collected data from companies spanning various industries (e.g., manufacturing, retailing, and consulting) in China. A two-wave, multisource data collection method was designed and implemented in the following steps. First, we recruited 90 research volunteers from Master of Business Administration (MBA) students at the third author's university. Then, each research volunteer recruited participants of a team from his/her company to participate in a two-phase survey. The Time 1 survey was distributed to 290 employees in 90 working teams via research volunteers to measure employees' narcissism, organizational valuing of creativity, and demographic information. In total, 273 employees (response rate = 94.1%) in 88 teams completed the Time 1 survey voluntarily. One month later, these employees were asked to report their direct experiences of creativity, vicarious experiences of creativity, and creative self-efficacy, and team leaders were asked to rate the individual creativity of these participating employees. In total, our final sample consisted of 268 (response rate = 92.4%) employees working in 86 teams.

Among the 268 employees, 62.7% were male, and 62.7% held a bachelor's degree or above. The average age of these employees was 32.5 years (SD = 7.6), and their average organizational tenure was 5.7 years (SD = 5.9). Of the 86 team leaders, 66.3% were male, and 81.4% held a bachelor's degree or above. The average age of the team leaders was 38.5 years (SD = 6.0), and the average organizational tenure of these leaders was 6.4 years (SD = 6.4). The average size of these teams was 3.1 (ranging from 3 to 4).

Measures

We followed the standard translation and back-translation procedures to ensure the validity of the measures that were translated from English into Chinese (Brislin, 1986). We used a seven-point Likert scale (1 = 'strongly disagree' to 7 = 'strongly agree') to measure all variables, except for narcissism.

Narcissism. Narcissism was measured using the NPI-16 scale, which has been prevalently used in the organizational management literature (Ames et al., 2006). This forced-choice scale captures subclinical or social narcissism and asks respondents to choose one of two statements that best describes them. A sample item pair on this scale is 'I am an extraordinary person' and 'I am much like everybody else'

($\alpha = 0.88$) (the first item in each pairing reflects narcissism and was coded as '1', and the other item was coded as '0').

Organizational valuing of creativity. Participants were asked to rate their organizational valuing of creativity using the six-item scale developed by Farmer et al. (2003). A sample item is 'Top management values creative work'. The reliability of these six items in this study was 0.94. We conceptualized the organizational valuing of creativity at the organizational level. The values of ICC ($ICC_{[1]} = 0.33$, $ICC_{[2]} = 0.60$) and Rwg (mean = 0.96, median = 0.98) indicated the appropriateness of aggregating this variable to the organizational level.

Direct and vicarious experiences of creativity. The direct and vicarious experiences of creativity were each measured by three items developed by Decius, Schaper, and Seifert (2019). The employees were asked to rate the extent to which they attempted and applied their own ideas (direct experiences of creativity) and engaged in model learning from other colleagues (vicarious experiences of creativity) at work as an informal learning process. A sample item measuring direct experiences of creativity ($\alpha = 0.93$) is 'I try a different method to solve new tasks at work', and a sample item measuring vicarious experiences of creativity ($\alpha = 0.85$) is 'I try new things out at my work, which I have copied from my colleagues'.

Creative self-efficacy. Creative self-efficacy was measured using Tierney and Farmer's (2002) three-item scale. The employees were asked to rate the extent to which they agreed with descriptions of their beliefs about successfully generating creative outcomes. A sample item is 'I have confidence in my ability to solve problems creatively' ($\alpha = 0.92$).

Creativity. Following prior research (e.g., Baer & Oldham, 2006), creativity was measured using a four-item short-version scale derived from the 13-item creativity scale developed by Zhou and George (2001). A sample item is 'Suggests new ways of performing work tasks'. Given that the supervisors had to rate multiple employees' creativity in our survey, we used this short-version scale to guarantee the quality of the data. This short-version scale showed good reliability in prior studies conducted in the Chinese context (e.g., He et al., 2020; Zhang, Long, Wu, & Huang, 2015). The reliability of these four items in this study was 0.93.

Controls. Following prior research (e.g., Zhang & Bartol, 2010), we controlled for employee gender, age, education, and team tenure, which were found to be associated with employee creativity in the organizational context (Shalley et al., 2004). To enhance the robustness of our findings, we reran our models without these control variables. Additionally, as the extreme score on an attribute may amplify the psychological effects, we also reran our models without the extreme narcissistic

individuals ($N = 17$) who had an extreme score on the narcissism (2 SD from the mean). All the results showed that our conclusions were unaffected after removing these controls or individuals from the data analyses.

Analytic Strategy

Because the employees were nested within teams, we used multilevel path analyses to test our hypotheses. Specifically, we used Mplus 8.3 software (Muthén & Muthén, 1998–2017) and maximum-likelihood estimation for the analysis. All level 1 predictors (i.e., narcissism, gender, age, education, and tenure) were centered by the group mean, and the level 2 moderator (i.e., organizational valuing of creativity) was centered by the grand mean (Enders & Tofighi, 2007). To reduce the model complexity, we modeled the effects of narcissism on direct experiences of creativity and vicarious experiences of creativity, creative self-efficacy, and creativity as random slopes and modeled other effects as fixed slopes. To examine Hypothesis 1, we first ran a mediation model (Model 1) while controlling the direct effects of organizational valuing of creativity. Then, we ran another path model (Mode 2) with the cross-level interactions to examine Hypotheses 2 and 3. All the path coefficients were estimated simultaneously from each path model. To examine the indirect effects (Hypothesis 2) and conditional indirect effects (Hypotheses 4 and 5), we used the Monte Carlo method with open-source software R (version 3.6.3) to compute the 95% confidence intervals of these effects. All the data[1], equation, syntax, and output can be reached in the online supplement (https://osf.io/2ysma/?view_only=66c373b66bbb4331af55c01e4544b7bc).

RESULTS

Confirmatory Factor Analyses

To establish the discriminant validity of our measures, we conducted a series of multilevel confirmatory factor analyses. The six-factor model including the three focal variables (narcissism, organizational valuing of creativity, direct experiences of creativity, vicarious experiences of creativity, creative self-efficacy, and creativity) as distinct factors demonstrated a good fit to the data ($\chi^2 = 871.31$, $df = 545$, $p < 0.001$, CFI $= 0.93$, TLI $= 0.93$, SRMR (standard root mean square residual)$_{between} = 0.00$, SRMR$_{within} = 0.05$, RMSEA (root mean square error of approximation) $= 0.05$). Moreover, this six-factor model fits the data better ($\Delta\chi^2 = 339.57$, $\Delta df = 3$, $p < 0.001$) than the alternative six-factor model in which direct and vicarious experiences of creativity were combined ($\chi^2 = 1210.88$, $df = 548$, $p < 0.001$, CFI $= 0.86$, TLI $= 0.85$, SRMR$_{between} = 0.00$, SRMR$_{within} = 0.08$, RMSEA $= 0.07$). Table 2 presents the means, standard deviations, and bivariate correlations of the variables used in our study.

Table 2. Means, standard deviations, and correlations

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Gender	0.63	0.48	–	−0.10	0.11	−0.06	0.04	0.33**	0.13	0.26*	0.17	0.19
2. Age	32.54	7.55	−0.02	–	−0.37**	0.74**	0.18	−0.07	−0.02	0.16	0.10	0.13
3. Education	3.54	0.79	0.13*	−0.34**	–	−0.50**	−0.19	−0.12	−0.15	−.28**	−0.26*	−0.17
4. Team tenure	5.70	5.88	−0.02	0.71**	−0.44**	–	−0.01	−0.05	0.05	0.22*	0.06	0.12
5. Narcissism	0.26	0.23	−0.07	0.09	−0.10	0.00	–	0.31**	0.23*	0.07	0.35**	0.26*
6. Direct experiences of creativity	5.32	1.11	0.10	−0.03	−0.06	−0.01	0.21**	–	0.27*	0.33**	0.38**	0.36**
7. Vicarious experiences of creativity	5.26	1.13	0.02	0.04	−0.12*	0.03	0.11	0.43**	–	0.32**	0.44**	0.29**
8. Creative self-efficacy	5.81	0.81	0.07	0.11	−0.10	0.12*	0.12	0.36**	0.37**	–	0.26*	0.53**
9. Creativity	5.07	0.82	0.04	0.08	−0.03	0.04	0.22**	0.29**	0.26**	0.47**	–	0.13
10. Organizational valuing of creativity	5.70	0.94	0.06	0.09	−0.19**	0.06	0.16*	0.31**	0.49**	0.24**	0.10	–

Notes: Teams = 86, employees = 268. Gender was a categorical variable (0 = *male*, 1 = *female*). Individual-level correlations are below the diagonal, and organization-level correlations are above the diagonal. $*p < 0.05$, $**p < 0.01$.

Table 3. Results of the multilevel path modeling (Model 1)

Independent variable	Direct experiences of creativity		Vicarious experiences of creativity		Creative self-efficacy		Creativity	
	b	se	b	se	b	se	b	se
Gender	0.01	0.08	−0.01	0.08	−0.04	0.07	−0.01	0.05
Age	−0.05	0.09	0.15	0.08	0.04	0.08	0.08	0.07
Education	−0.04	0.09	−0.14	0.09	0.08	0.07	0.07	0.06
Team tenure	0.04	0.12	−0.14	0.09	0.09	0.09	−0.06	0.07
Narcissism	0.11	0.10	−0.06	0.11	−0.00	0.10	0.13	0.07
Direct experiences of creativity					0.20*	0.09	0.07	0.05
Vicarious experiences of creativity					0.23*	0.09	0.03	0.06
Creative self-efficacy							0.24**	0.07
Organizational valuing of creativity	0.22**	0.07	0.28***	0.06	−0.00	0.25	−0.26	0.19
R^2	0.17		0.20		0.31		0.41	

Notes: Teams = 86, employees = 268. Gender was a categorical variable (0 = *male*, 1 = *female*). *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

Hypothesis Testing

Because employees were nested within 86 teams, we used multilevel modeling to test our hypotheses. Hypothesis 1 proposed that narcissism is positively related to direct experiences of creativity. As shown in Table 3, the relationship between narcissism and direct experience of creativity is not significant ($b = 0.11$, $p = 0.25$), rejecting Hypothesis 1. Hypothesis 2 proposed that the organizational valuing of creativity moderates the relationship between narcissism and direct experiences of creativity. As shown in Table 4, the interaction term (narcissism × organizational valuing of creativity) was positively related to direct experiences of creativity ($b = 0.27$, $p < 0.001$). Figure 2 shows the interaction pattern. The simple slope tests indicated that the relationship between narcissism and direct experiences of creativity was significantly positive ($b = 0.32$, $p = 0.003$) when organizational valuing of creativity was higher and was not significant ($b = −0.22$, $p = 0.06$) when organizational valuing of creativity was lower, supporting Hypothesis 2. Hypothesis 3 proposed that the organizational valuing of creativity moderates the relationship between narcissism and vicarious experiences of creativity. As shown in Table 4, the interaction term (narcissism × organizational valuing of creativity) was also positively related to vicarious experiences of creativity ($b = 0.32$, $p < 0.001$). The simple slope tests (also shown in Figure 3) also indicated that the relationship between narcissism and vicarious experiences of creativity was

Table 4. Results of the multilevel path modeling (Model 2)

| | Dependent variable | | | | | | | |
| | Direct experiences of creativity | | Vicarious experiences of creativity | | Creative self-efficacy | | Creativity | |
Independent variable	b	se	b	se	b	se	b	se
Gender	0.01	0.08	−0.02	0.08	−0.03	0.06	−0.01	0.05
Age	−0.05	0.08	0.14	0.08	0.04	0.08	0.08	0.07
Education	−0.05	0.09	−0.13	0.09	0.07	0.07	0.06	0.06
Team tenure	0.05	0.12	−0.11	0.09	0.08	0.09	−0.06	0.07
Narcissism	0.05	0.09	−0.10	0.09	−0.02	0.09	0.11	0.07
Direct experiences of creativity					0.17*	0.08	0.06	0.06
Vicarious experiences of creativity					0.20*	0.08	0.03	0.07
Creative self-efficacy							0.23**	0.08
Organizational valuing of creativity	0.21**	0.06	0.27***	0.06	−0.05	0.25	−0.25	0.22
Narcissism × organizational valuing of creativity	0.27***	0.07	0.32***	0.08	0.30***	0.06	0.04	0.08
R^2	0.17		0.19		0.31		0.41	

Notes: Teams = 86, employees = 268. Gender was a categorical variable (0 = *male*, 1 = *female*). $*p < 0.05$, $**p < 0.01$, $***p < 0.001$.
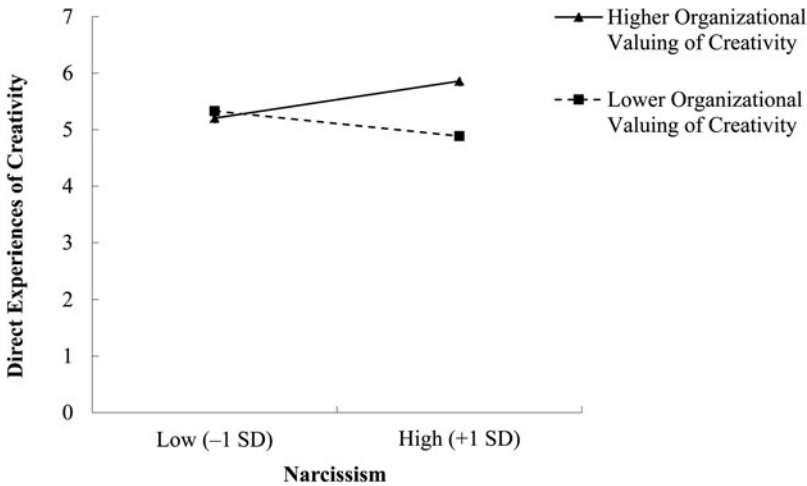

Figure 2. The interaction between narcissism and organizational valuing of creativity in predicting direct experiences of creativity

significantly positive when the organizational value of creativity was higher ($b = 0.22$, $p = 0.03$) and was significantly negative ($b = 0.42$, $p = 0.001$) when the organizational value of creativity is lower, supporting Hypothesis 3.
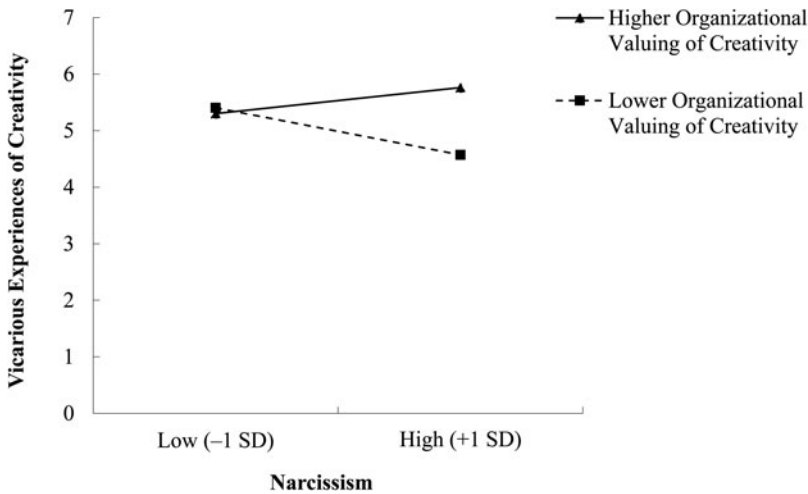
Figure 3. The interaction between narcissism and organizational valuing of creativity in predicting vicarious experiences of creativity

Hypothesis 4 proposed that the organizational valuing of creativity moderates the indirect relationship between narcissism and creativity via (a) direct experiences of creativity and (b) vicarious experiences of creativity and creative self-efficacy. As shown in Table 4, creative self-efficacy was positively related to direct experiences of creativity ($b = 0.17$, $p = 0.03$), vicarious experiences of creativity ($b = 0.20$, $p = 0.01$), and creativity ($b = 0.23$, $p = 0.004$). The results of the Monte Carlo method with 20,000 bootstraps indicated that the indirect effect of narcissism on creativity via direct experiences of creativity and creative self-efficacy was significantly positive (*indirect effect* = 0.01, 95% CI [0.0003, 0.035]) when the organizational valuing of creativity was higher and was not significant (*indirect effect* = −0.01, 95% CI [−0.028, 0.001]) when the organizational valuing of creativity was lower, and the difference between these two indirect effects was significant (*difference* = 0.02, 95% CI [0.001, 0.057]; *moderated mediation index* = 0.01, 95% CI [0.001, 0.029]). Thus, Hypothesis 4a was supported. Finally, the indirect effect of narcissism on creativity via vicarious experiences of creativity and creative self-efficacy was positive (*indirect effect* = 0.01, 95% CI [−0.001, 0.032]) when the organizational valuing of creativity was higher and was significantly negative (*indirect effect* = −0.02, 95% CI [−0.049, −0.002]) when the organizational valuing of creativity was lower, and the difference between these two indirect effects was significant (*difference* = 0.03, 95% CI [0.004, 0.073]; *moderated mediation index* = 0.01, 95% CI [0.002, 0.036]), supporting Hypothesis 4b.

DISCUSSION

Prior research has generated enduring debate on the relationship between narcissism and creativity. Drawing on social cognitive theory (Bandura, 1986), we try to

resolve this debate by proposing that whether narcissism boosts or impedes creativity depends on their experiences with creativity and creative self-efficacy, which are influenced by creativity-related work context features. We found support for our conceptual model in a field study. Specifically, the results suggested that (a) narcissism was positively related to direct experiences of creativity under higher organizational valuing of creativity but was not related to direct experiences of creativity under lower organizational valuing of creativity, (b) narcissism was positively related to vicarious experiences of creativity under higher organizational valuing of creativity but was negatively related to vicarious experiences of creativity under lower organizational valuing of creativity, and (c) employees' experiences of creativity and creative self-efficacy mediated the interactive effect of narcissism and organizational valuing of creativity on creativity.

Theoretical Contributions

Our first contribution is to the narcissism literature. Our study reconciles the controversy on the relationship between narcissism and creativity from a social cognitive perspective. We theorized that narcissists' creativity depends on their creative self-efficacy, which is influenced by their direct and vicarious experiences with creativity. As narcissists are sensitive to self-enhancement opportunities (Morf & Rhodewalt, 2001), their direct and vicarious experiences of creativity may fluctuate greatly depending on the self-enhancement opportunities included in the context. Our findings posit that the development of narcissists' creative self-efficacy is a function of narcissism and the broader environment (i.e., organizational valuing of creativity), in which they are embedded. Organizational valuing of creativity can enhance the narcissists' perceptions of self-enhancement opportunities, which motivates them to engage in both direct and vicarious experiences of creativity. However, when organizational valuing of creativity is absent, narcissists' self-enhancement motive on a good image of creativity may be demotivated, and their inflated ego will impede their vicarious learning of creativity, which reduces their creativity. We not only introduce new insights into understanding the relationship between narcissism and creativity by theorizing and testing a social cognitive explanation but also contribute to social cognitive theory by providing empirical evidence on the antecedents of creative self-efficacy.

Second, we contribute to the narcissism literature by deepening the understanding of contexts and different resources that cultivate narcissists' creative self-efficacy. By integrating trait activation theory (Tett & Burnett, 2003) and social cognitive theory (Bandura, 1986), our findings indicated that organizational valuing of creativity could activate narcissists' self-enhancement motivation and deliver the message that displaying high creativity at work can gain a superior image. Under this kind of sense-giving, narcissists put their efforts into creativity-related activities (including direct and vicarious experiences of creativity), which

are beneficial to their creative self-efficacy. We presented that the sources of narcissists' creative self-efficacy were different under different levels of organizational valuing of creativity. Under high organizational valuing of creativity, narcissists' creative self-efficacy came from both direct and vicarious experiences of creativity; however, under low organizational valuing of creativity, narcissists' decreased vicarious experiences of creativity were the main cause of their low creative self-efficacy.

Finally, by integrating trait activation theory and social cognitive theory, our research contributes to the person-in-context interactionist perspective of creativity research (Shalley et al., 2004; Woodman et al., 1993) by demonstrating that organizational valuing of creativity will interact with narcissism to facilitate creativity via creative self-efficacy. Prior research has largely focused on the interaction between the creative personality scale or openness to experience and a limited number of supervisory factors (e.g., Oldham & Cummings, 1996; Zhou & George, 2001). Our research extends this stream by introducing the interaction between an organizational culture (i.e., organizational valuing of creativity) and a dark trait (i.e., narcissism). In addition, although scholars have discussed employee creativity from the person-in-context interactionist perspective, few studies have examined the underlying mechanism (Shalley et al., 2004). By presenting and testing that employees' creative self-efficacy can be a potential mediator, our study extends prior research that mainly proposed intrinsic motivation as the mediator (Chen, Li, & Leung, 2016; Li, Li, & Chen, 2018a).

Practical Implications

The present study also has important practical implications for organizations. Specifically, our findings suggest that organizations seeking to value employee creativity need to be aware of the role of the narcissistic personality, that is, high narcissism is optimal for employees to develop high creative self-efficacy and generate creative outcomes at work. However, given that extreme narcissists have been found to undermine collective effectiveness by performing undesirable behaviors in organizations (O'Boyle, Forsyth, Banks, & McDaniel, 2012), organizations should pay attention to applicants' narcissism during recruitment. Specifically, managers can utilize standard personality assessments (e.g., the NPI, Ames et al., 2006) to examine applicants' level of narcissism. Recruiting a modest level of narcissism may be suitable for positions that need creative product development.

Since high narcissism is a common characteristic of new-generation employees, current organizations will inevitably employ narcissists. One way organizations can encourage narcissistic employees to generate creative outputs at work is by creating a strong organizational culture that values and rewards creativity. The social context created by organizations or leaders plays a crucial role in fostering employee creativity (Li, Li, Guo, Li, & Harris, 2018b; Shalley & Gilson, 2004). Our findings suggest that narcissists are also more effective in generating creative

performance under higher organizational valuing of creativity. For example, managers can assign new-generation employees who demonstrate narcissism projects that require creative product development, marketing, or process innovation. Organizations can also create a strong climate in which creativity is highly valued and rewarded to enhance narcissists' creativity.

Limitations and Future Research Directions

While our research offers important theoretical and practical implications, it still has some limitations that provide avenues for future research. First, our conceptualization and measurement of narcissism are limited in developing more nuanced theorizing regarding the relationship between narcissism and creativity. Although utilization of the NPI-16 as a measurement tool is prevalent in organizational research (e.g., Den Hartog, De Hoogh, & Belschak, 2020; Huang, Krasikova, & Harms, 2020), it was unable to decompose narcissism into different trait dimensions and explore their unique influences on creative self-efficacy in the contexts of high- and low-creativity environments. For example, grandiose narcissism and vulnerable narcissism have been found to have different implications for individual psychological distress and negative affect (Miller et al., 2011), which may also be related to the development of individual self-efficacy (Bandura, 1986).

Second, prior research has indicated that narcissism relates more positively to self-rated creativity than other-rated creativity. This is because the subjective ratings of the narcissists' creativity may still be upward biased by narcissists' inflated ego. However, we collected data on employees' creativity from their direct leaders to avoid self-reported bias. Narcissistic employees might still be considered more creative in their supervisors' eyes because narcissists are likely to influence supervisors' evaluations through various self-enhanced tactics (Buss & Chiodo, 1991). Thus, we recommend that future research use objective measures of creativity to validate our findings in organizational contexts further.

Third, the organizational valuing of creativity was the only moderator examined in the current research. Thus, future research could search for other situational factors that may activate or inactivate narcissists' self-enhancement motive, which, in turn, moderate the effects of narcissism on creative self-efficacy. For example, Chinese culture has a higher tendency to be humble and keep harmony with others (Leung et al., 2018), which may inactivate narcissists' motivation for creative activities. Thus, the interacting effect between organizational valuing of creativity and narcissism may be stronger in Chinese culture. Future research can theorize and examine a three-way interaction among organizational valuing of creativity, narcissism, and Chinese values (e.g., power distance, collectivism, zhongyong, etc.) and its effect on employee creativity.

Finally, our small sample size (268 employees working in 86 teams) may also limit the generalizability of our results. Future research can adopt a larger sample size and use the full latent multilevel structural equation modeling to validate our

findings. Moreover, Chinese culture is strongly influenced by Confucianism, Buddhism, Zhong Yong, Daoism, and Yin Yang (Pan, Rowney, & Peterson, 2012), which may affect the effects of narcissism. In Chinese culture, employees may have low levels of independent self-construal than employees in Western culture, resulting in low levels of narcissism (Meisel, Ning, Campbell, & Goodie, 2016). Therefore, scholars can conduct research in different cultural contexts in the future to cross-validate our findings and explore some interest differences between different samples.

NOTES

[1] The dataset in this manuscript has not been used in a previously published study and is not currently under review elsewhere.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are openly available in the Open Science Framework at https://osf.io/2ysma/?view_only = 66c373b66bbb4331af55c01e4544b7bc

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