# Paradoxical Effects of Narcissism on Creative Performance: Roles of Leader–Follower Narcissism (In)Congruence and Follower Identification with the Leader

**Abstract**

What is the effect of trait narcissism on creative performance in the workplace? Prior investigations of the narcissism–creative performance relationship have produced inconsistent findings and failed to provide conclusive answers to this question. One possible reason for the seemingly contradictory evidence is that the extant research has examined the effects of leader and follower narcissism separately rather than simultaneously. In the present study, we address this issue by investigating leader–follower narcissism (in)congruence to comprehensively understand *when* and *why* leader or follower narcissism is beneficial or detrimental to creative performance. Integrating the self-orientation model of narcissism and narcissistic-tolerance theory, we posit that leader and follower narcissism jointly influence creative performance via identification with the leader, and that different leader–follower narcissism (in)congruence combinations exhibit distinct effects. The analyses of two-wave, two-level, and multi-source data from 421 followers and 54 direct leaders using cross-level polynomial regressions support our hypotheses: (1) Identification with the leader is maximized when leader narcissism and follower narcissism are congruent; (2) identification with the leader is minimized when leader narcissism is higher than follower narcissism; and (3) identification with the leader mediates the effects of leader–follower narcissism (in)congruence combinations on creative performance.

*Keywords:* Narcissism; leader–follower narcissism (in)congruence; creative performance; identification with the leader; polynomial regression

Narcissism[[1]](#footnote-2)—a multifaceted personality trait with both positive (e.g., confidence and visionary) and negative (e.g., arrogance and exploitativeness) characteristics (Morf & Rhodewalt, 2001; Raskin, 1980; Rosenthal & Pittinsky, 2006)—influences numerous work behaviors (for reviews, see Braun, 2017; Cragun, Olsen, & Wright, 2020; Emily Grijalva & Harms, 2014). Among the work outcomes of narcissism that prior research has investigated, creative performance—an individual’s development of novel and useful ideas, products, services, and work methods (Amabile, 1996; Oldham & Cummings, 1996)—is particularly critical in the modern workplace. Creative performance is a key driver of an organization’s competitive advantage (for reviews, see Anderson, Potočnik, & Zhou, 2014; Tierney, 2008; J. Zhou & Hoever, 2014). Further, trait narcissism is likely linked with creative performance, as both constructs emphasize uniqueness, novelty, and nonconformance to social conventions (Amabile, 1996; Morf & Rhodewalt, 2001; Oldham & Cummings, 1996; Raskin, 1980).

Although several studies have explored the relationship between narcissism and creative performance, the empirical evidence to date has been largely equivocal, irrespective of whether the focus is on leader narcissism or follower narcissism. Leaders with higher levels of narcissism can be bold, charming, visionary, and open to challenging tasks (Galvin, Waldman, & Balthazard, 2010), with all of these characteristics facilitating follower creative performance (L. Zhou et al., 2019). However, they can also be arrogant, aggressive, hostile, and self-centered (Morf & Rhodewalt, 2001; Rosenthal & Pittinsky, 2006)—characteristics that tend to hinder follower creative performance (Z. Liu, Zhou, Wei, Ouyang, & Zhou, 2021; Yang et al., 2020). Indeed, empirical evidence increasingly suggests that narcissism is frequently both an asset and a liability for leaders (Braun, 2017; X. Liu, X. Zheng, et al., 2022). Followers with higher levels of narcissism typically have high needs for self-expression and recognition (Raskin, 1980) and are particularly cognizant of opportunites to elicit others’ admiration through creative performance. Supporting this association, several empirical studies have indicated positive correlations between follower narcissism and creativity (e.g., Furnham, Hughes, & Marshall, 2013; Mao, Quan, Li, & Xiao, 2021; Martinsen, Arnulf, Furnham, & Lang-Ree, 2019). However, followers with higher levels of narcissism may also find it challenging to work with others and overestimate their abilities and contributions. Accordingly, some empirical studies have found a non-significant (e.g., Goncalo, Flynn, & Kim, 2010; Wisse, Barelds, & Rietzschel, 2015) or even negative (e.g., Wallace and Baumeister, 2002) relationship between narcissism and creative performance, suggesting that the effects of this relationship in the workplace are not entirely straightforward.

One possible reason for these conflicting findings could be that prior research has adopted either a leader-centric or follower-centric perspective, but no existing research to date has examined leader narcissism and follower narcissism simultaneously. This is a critical oversight because leadership is a dyadic process that centers on both leader and follower (Brown, 2012; Krasikova & LeBreton, 2012) and narcissism itself is considered an interpersonal trait (Miller at al., 2012). A leader’s actions and the follower’s interpretation of or reaction to those actions are both critical determinants of follower behaviors (Epitropaki, Sy, Martin, Tram-Quon, & Topakas, 2013; Padilla, Hogan, & Kaiser, 2007), including creative performance. Moreover, the narcissism literature has suggested that individuals who are higher or lower on narcissism exhibit different attitudes toward highly narcissistic individuals, which may in turn lead to both positive and negative consequences. Specifically, the self-orientation model of narcissism (W. Keith Campbell, 1999) suggests that individuals higher on narcissism value control, dominance, and fame and have an affinity for individuals who are similarly higher on narcissism. Further, narcissistic-tolerance theory (Hart & Adams, 2014) posits that individuals higher on narcissism—though ordinarily harsh, disagreeable, and difficult to work with—are more likely to tolerate narcissistic behaviors in others than are those lower on narcissism. Therefore, different leader–follower narcissism combinations may produce distinct effects, such that some may be more positive or negative than others. Indeed, prior research has reported that leader–follower personality (in)congruence influences employees’ attitudes and behaviors (e.g., Cha, Chang, & Kim, 2014; Harms, Bai, & Han, 2016; Z. Zhang, Wang, & Shi, 2012). Thus, our aim in this research is toconsider leader and follower narcissism *simultaneously* and examine how the interactions between leaders and followers with higher or lower narcissism might help or hinder follower creative performance.

Based on the shared elements of the self-orientation model of narcissism (W. Keith Campbell, 1999) and narcissistic-tolerance theory (Hart & Adams, 2014), we posit that follower identification with the leader is a key mechanism explaining *why* different leader–follower narcissism combinations can differentially influence follower creative performance. *Follower identification with the leader*, a relational identification, refers to the extent to which a follower defines himself/herself in terms of the leader or perceives “oneness” with the leader (Ashforth, Schinoff, & Rogers, 2016; Sluss & Ashforth, 2007); this “follower interpersonal relationship with the leader” (Ete, Epitropaki, Zhou, & Graham, 2022 754) can be used to interpret the mechanism through which a leader influences subsequent follower outcomes (Gu, Tang, & Jiang, 2015; Lam, Lee, Taylor, & Zhao, 2018). The self-orientation model of narcissism and narcissistic-tolerance theory suggest that although individuals with higher levels of narcissism may have unfavorable social characteristics (e.g., self-centered, harsh, and hostile), they also depend on interpersonal relationships to maintain and reinforce their inflated self-views, especially when interacting with persons who themselves are higher on narcissism (W. Keith Campbell, 1999; Hart & Adams, 2014). Furthermore, as identification with the leader captures the extent to which followers include the leader in their relational self (Kark, Shamir, & Chen, 2003), it may motivate followers to contribute to the leader’s goals and cultivate self-motivational interest and self-expansion by exhibiting creative performance (Gu et al., 2015; Hirst, van Dick, & van Knippenberg, 2009). Figure 1 depicts our theoretical model.

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Our research makes three primary theoretical contributions. First, by differentiating scenarios of leader–follower narcissism (in)congruence and determining the most beneficial and detrimental combinations, we provide a novel, yet more comprehensive explanation of the inconsistent findings concerning the relationship between leader or follower narcissism and follower creative performance documented in prior research. Further, by focusing on the simultaneous effects of leader and follower narcissism, our work advances the previous literature on narcissism that has adopted either a leader-centric or follower-centric approach. Second, prior studies investigating how leader/follower narcissism influences follower creative performance have limited their focus by examining cognitive dependency as a mediator between leader narcissism and follower creative performance (i.e., Yang et al., 2020) or investigating creative self-efficacy as the mediator between follower narcissism and creative performance (i.e., Mao et al., 2021). While these prior studies have mainly centered on the cognitive mechanisms, we introduce a relational perspective that enriches the narcissism literature by examining follower identification with the leader as a meaningful psychological conduit for how leader/follower narcissism influences follower creative performance. Third, our research also contributes to the self-orientation model of narcissism (W. Keith Campbell, 1999) and narcissistic-tolerance theory (Hart & Adams, 2014). Specifically, our work not only integrates and tests the key elements of these theories in a novel manner by examining the influences of leader–follower narcissism (in)congruence on follower identification with the leader, but also expands their application scope from romantic relationship and friendship contexts to the leader–follower dyadic relationship in the workplace.

# Theory and hypotheses

## Narcissism and creative performance

Narcissism, a subclinical trait, is characterized by self-confidence, entitlement, vanity, and a willingness to exploit others (Grijalva and Harms, 2014). In addition, it incorporates a deep-seated desire to be seen as unique or special, manifested as a willingness to take risks (Vazire and Funder, 2006), engage in showy displays designed to garner attention (Vazire et al., 2008), and demonstrate nonconformance with social conventions (Campbell and Foster, 2002; Morf and Rhodewalt, 2001). Many of these features (e.g., risk-taking, uniqueness, nonconformance) have also been identified as being part of creative activity; indeed, these characteristics are often seen as antecedents of creative performance (Amabile, 1996; Zhou and Hoever, 2014). Given that the acclaim associated with successful creative performance and innovation can generate the positive attention that narcissists seek (see Byron and Khazanchi, 2012), narcissism scholars have asserted that there should be a direct relationship between narcissism and creative outcomes (W. Keith Campbell, Hoffman, Campbell, & Marchisio, 2011; Mao et al., 2021). In turn, emerging empirical studies in the field of organizational behavior have explored whether, how, and when leader or follower narcissism can affect team or follower creative performance.

However, the extant literature linking leader and follower narcissism to creative performance has shown decidedly mixed findings. Specifically, Zhou et al. (2019) found a positive impact for leader narcissism on team creative performance, whereas Liu et al. (2021) and Yang et al. (2020) reported a negative relationship between leader narcissism and team or follower creative performance. Similarly mixed results have been found for follower narcissism, with some studies reporting a positive correlation (e.g., Furnham et al., 2013; Mao et al., 2021; Martinsen et al., 2019) between narcissism and creative performance and others finding non-significant (e.g., Goncalo et al., 2010; Wisse et al., 2015) or even negative (e.g., Wallace & Baumeister, 2002) relationships. Thus, it remains unclear when narcissism should be considered a boon or a bane for leaders and followers in influencing follower creative performance and under which circumstances each effect is more likely to prevail. Consequently, there remains a critical need to gain a fuller understanding of *when* and *why* leader and follower narcissism are beneficial or detrimental to follower creative performance.

Our research aims to help resolve these conflicting findings by looking at leader narcissism and follower narcissism simultaneously and examining how the interpersonal interactions between leaders and followers with higher or lower narcissism might help or hinder follower creative performance.

## Narcissism in interpersonal relationships

Individuals with higher narcissism tend to be preoccupied with appearances of competence and their own social impact in interpersonal relationships (W. K. Campbell, Brunell, & Finkel, 2006; W. K. Campbell & Foster, 2007). They are achievement-focused and enjoy demonstrating their excellence to others (W. Keith Campbell et al., 2011; DuBrin, 2012; Galvin et al., 2010). Although individuals with higher narcissism are self-centered and unempathetic toward others, they require persistent validation and acknowledgment of their superiority from others in interpersonal relationships to maintain their inflated self-views and, accordingly, build and maintain satisfactory relationships with certain individuals (Emily Grijalva & Harms, 2014; Morf & Rhodewalt, 2001). How individuals with higher levels of narcissism behave in interpersonal relationships is distinctly captured by two related theories in the narcissism literature: the self-orientation model of narcissism and narcissistic-tolerance theory.

The self-orientation model of narcissism suggests that highly narcissistic individuals are more likely to be attracted to—and identify with—self-oriented narcissistic individuals who pursue greater power and achievement, but are less attracted to other-oriented individuals who predominantly pursue relational intimacy (Bachrach, Yong, Patel, & Harms, 2023; W. Keith Campbell, 1999). This preference is driven by such individuals’ self-interest and desire for self-enhancement instead of care for others (W. K. Campbell et al., 2006; W. K. Campbell & Foster, 2007). Nevertheless, they may believe that other self-oriented individuals can enhance their own perceived importance and popularity. In addition, they tend to perceive similarities between themselves and self-oriented targets rather than other-oriented ones, which then may reinforce their views as normal and even desirable. Indeed, Freud (1914/1957) stated that a highly narcissistic individual is attracted to “what he himself is [and] what he himself would like to be” (p. 90).

Similarly, narcissistic-tolerance theory posits that highly narcissistic individuals, who are frequently characterized as interpersonally harsh and disagreeable toward others, tend to tolerate other highly narcissistic individuals’ dark side—for example, their exploitativeness, harshness, and hostility (Hart & Adams, 2014). This tolerance helps individuals higher on narcissism legitimize their interpersonal faults and maintain their positive self-views (Hart & Adams, 2014). This tolerance can also be explained by their perceived similarity with their targets (Burton et al., 2017), which attenuates narcissistic aggression and activates positive interpretations of highly narcissistic individuals’ behaviors (Konrath, Bushman, & Campbell, 2006).

In summary, the self-orientation model of narcissism and narcissistic-tolerance theory focus on different aspects of narcissistic cognitions and behavior in interpersonal relationships. The self-orientation model of narcissism centers on the “attraction” aspect (i.e., individuals with higher levels of narcissism appreciate the bright side of narcissism), whereas narcissistic-tolerance theory demonstrates the “tolerance” aspect (i.e., individuals with higher narcissism are more prone to tolerate the dark side of narcissism). Nevertheless, these two theories ultimately hinge on the same principle: Highly narcissistic individuals use interpersonal relationships as an instrument to enhance or protect their self-concepts by identifying with others with similarly narcissism, which further fuels their agentic behaviors and agendas.

Integrating the self-orientation model of narcissism and narcissistic-tolerance theory, we unravel *when* and *why* different leader–follower narcissism (in)congruence combinations help or hurt follower creative performance. Specifically, we compare three leader–follower narcissism combinations: when leader narcissism is (1) congruent with follower narcissism,[[2]](#footnote-3) (2) higher than follower narcissism, and (3) lower than follower narcissism. Based on the theories and arguments in the narcissism literature, we posit that these three leader–follower narcissism combinations differentially influence follower identification with the leader and, subsequently, follower creative performance. Next, we identify the most beneficial and most detrimental leader–follower narcissism combinations.

## The most beneficial leader–follower narcissism combination

We propose that follower identification with the leader is maximized when leader narcissism and follower narcissism are congruent, rather than in incongruent situations. The major reason is that highly narcissistic followers are more likely to recognize and appreciate the bright side of highly narcissistic leaders while also tolerating their dark side. Consequently, these highly narcissistic followers internalize the leader’s values and beliefs as part of their self-concept and strongly identify with the highly narcissistic leader.

The self-orientation model of narcissism (W. Keith Campbell, 1999) suggests that highly narcissistic followers are attracted to highly narcissistic leaders who are bold and charming, rather than to leaders who display lower narcissism. This interpersonal attraction effect can enhance highly narcissistic followers’ identification with the leader (Sluss & Ashforth, 2007). Moreover, previous research on follower identification with the leader has posited that social attraction occurs when followers’ attributes (e.g., personality and values) align with those of their leader (Kark et al., 2003; Lam et al., 2018; Sluss & Ashforth, 2007), or when followers perceive similarities between themselves and their leader (Marstand, Epitropaki, & Martin, 2018; Van Knippenberg, Van Dick, & Tavares, 2007), which further intensifies follower identification with the leader. Specifically, because individuals with higher narcissism focus on agency (W. K. Campbell et al., 2006; W. K. Campbell & Foster, 2007), highly narcissistic followers are likely to recognize when they share similar values and attributes with the leader, feel oneness with the leader, and perceive value in being associated with a highly visible, impactful leader, insofar as the relationship allows them to enhance their own reputation (Bachrach et al., 2023). As such, highly narcissistic followers may view highly narcissistic leaders as being more attractive or having desirable attributes (Ashforth et al., 2016; Ete et al., 2022; X. Liu, X. Zheng, et al., 2022), prompting closer identification between them. In comparison, when they interact with leaders characterized by lower levels of narcissism, highly narcissistic followers may be less attracted and perceive them as possessing fewer desirable attributes, resulting in lower identification with the leader.

According to narcissistic-tolerance theory (Hart & Adams, 2014), followers with higher (versus lower) narcissism are more likely to tolerate the more toxic attributes of leaders who also have higher levels of narcissism. Highly narcissistic leaders may act harshly toward their followers and assign them demanding tasks for the purposes of pursuing their own agendas and promoting their own stature as leaders (Judge, LePine, & Rich, 2006; Rosenthal & Pittinsky, 2006; Sedikides & Campbell, 2017). Nevertheless, compared with individuals lower on narcissism, highly narcissistic followers are more likely to appreciate, understand, forgive, and identify with the motivations of highly narcissistic leaders owing to their shared drive for achievement and power (W. K. Campbell et al., 2006; W. K. Campbell & Foster, 2007). Highly narcissistic followers might even pursue recognition above their peers in an environment where such renown is not typically forthcoming and where success may imply that an individual possesses exceptional skills (Harms, Spain, & Hannah, 2011; Maccoby, 2000). Therefore, even when leaders with higher levels of narcissism act in demanding ways, highly narcissistic followers may identify more intensely with the leader, compared with their counterparts with lower narcissism. By contrast, because followers with lower levels of narcissism are less likely to understand the motives of individuals higher on narcissism or see the value of working in intensely competitive environments, they may be less likely to perceive similarities between themselves and the highly narcissistic leader, and may feel threatened when faced with a demanding and disdainful leader. As such, we expect followers lower on narcissism to exhibit lower levels of identification with the leader when paired with highly narcissistic leaders. Hence, we propose the following hypothesis:

*Hypothesis 1:* Follower identification with the leader is maximized when leader narcissism and follower narcissism are congruent rather than incongruent.

## The most detrimental leader–follower narcissism combination

Although leader–follower interactions are negatively influenced in both incongruence conditions, we predict asymmetrical incongruence effects. Specifically, we expect to see more detrimental effects on identification with the leader when leader narcissism is higher than follower narcissism, compared with when leader narcissism is lower than follower narcissism.

When leader narcissism is higher than follower narcissism, beyond the negative impact resulting from leader–follower narcissism incongruence, the detrimental effects of leader narcissism on follower identification with the leader are likely to be magnified in the absence of a dispositionally resilient, ego-enhancing drive in the follower that might counter such effects. Followers with lower narcissism are expected to care more about intimacy and caring than about a sense of agency (W. K. Campbell et al., 2006; W. K. Campbell & Foster, 2007), and a highly narcissistic leader who exhibits little regard for them or their values is likely to be perceived as socially unattractive and a potential threat. Such a misalignment originating from dissimilarity and undesirable attributes (i.e., narcissism) is likely to reduce identification with the leader (Kark et al., 2003; Sluss & Ashforth, 2007). Furthermore, the self-orientation model of narcissism (W. Keith Campbell, 1999) suggests that highly narcissistic leaders are particularly disdainful toward followers who are lower on narcissism. This factor—along with the power differential in leader–follower dyads—predicts that the combination of a highly narcissistic leader with a follower lower on narcissism will be particularly fraught with peril. Specifically, interpersonal abuse (a regular feature of relationships involving a narcissist) is more likely to be directed downward at followers, rather than upward at supervisors (Wee, Liao, Liu, & Liu, 2017). Finally, narcissistic-tolerance theory (Hart & Adams, 2014)suggests that followers lower on narcissism are less likely to appreciate or understand a highly narcissistic leader’s actions and attitudes and less able to handle or tolerate the potential abuse and harsh treatment from such leaders. As a result, followers with lower narcissism are unlikely to build psychological bonds with a highly narcissistic leader.

By contrast, a leader–follower narcissism pairing wherein leader narcissism is lower than follower narcissism is likely to be less detrimental for follower identification with the leader (albeit still not positive). Although highly narcissistic followers are less likely to see themselves as similar to leaders lower on narcissism, their internal drive for self-enhancement should, nevertheless, promote their psychological bonding with a leader who occupies a position marked by relatively higher power and control in the workplace, even when this leader is relatively lower on narcissism. Indeed, individuals with higher levels of narcissism tend to capitalize on their interpersonal relationships with the higher-ups as an instrument to maintain positive self-views (W. K. Campbell et al., 2006; W. K. Campbell & Foster, 2007). Beyond their own tendency to identify with their leader, highly narcissistic followers are highly effective at impression management in the presence of others (W Keith Campbell & Foster, 2002; Jean M. Twenge & Campbell, 2009). Highly narcissistic individuals are both motivated and skilled at informing others of their competence and strengths and aggressively seek key resources to achieve their goals (W. Keith Campbell et al., 2011; E. Grijalva & Zhang, 2016; Wallace & Baumeister, 2002). Highly narcissistic followers are more likely to present themselves as competent and skilled; hence, they tend to be appreciated, even by leaders with lower levels of narcissism, and build relatively satisfactory psychological bonds with such leaders. Thus, despite the potentially detrimental effects of leader–follower narcissism incongruence, highly narcissistic followers can regulate themselves and alleviate such dysfunctional impacts on identification with the leader. Based on these arguments, we propose the following hypothesis:

*Hypothesis 2:* Follower identification with the leader is minimized when leader narcissism is higher than follower narcissism, compared with when leader narcissism is lower than, or congruent with, follower narcissism.

## Mediating role of identification with the leader

Further, we predict that follower identification with the leader serves as a key conduit through which the joint influences of leader narcissism and follower narcissism is transmitted to follower creative performance. Individuals typically desire to gain social approval through the integration of the self with important others, as these targets can potentially provide added resources and a sense of significance (Aron and Aron, 1986, 1996). Such self-expansion further motivates individuals to care about the important others and try their best to bring benefits to these persons (Aron and Aron, 1996; Leary, 2007). Similarly, when followers highly identify with their leader, it suggests that followers view the leader as a referent in their self-definition and self-concept (Aron and Aron, 1986, 1997) and will tend to respond positively to that leader with active behaviors, such as creative performance that might further the leader’s agenda or interests (Z. Wang, Xing, Xu, & Hannah, 2021).

Relatedly, followers who perceive oneness with the leader are more likely to view the leader’s interests as their own, internalize the performance requirements specified by the leader, exhibit greater commitment to and consideration of the leader’s needs, and even display self-expansion through spillover identification onto the team and organization (Ete et al., 2022; Sluss & Ashforth, 2007; P. Wang & Rode, 2010). Highly narcissistic leaders, who desire to feel special and demand acclaim and respect from others (Campbell et al., 2011), will be especially sensitive to the activities most likely to produce these outcomes. Consequently, such leaders will tend to value and encourage follower creative performance and are likely to see creative performance as a vehicle for demonstrating their own superiority and skill as a leader. That said, leaders with lower levels of narcissism are also likely to care and encourage follower creative performance as a beneficial activity for the organization (Zhou and Hoever, 2014). In turn, followers who identify with their leaders are likely to be motivated to internalize the leaders’ pursuit and engage in higher creative performance (Gu et al., 2015; Qu, Janssen, & Shi, 2015).

Higher identification with the leader can also make the interests and agenda of the leader more salient (P. Wang & Rode, 2010) and motivate followers to work toward and beyond the leader’s expectations. Creative work, which requires novel and useful ideas to improve organizational functioning, is often more difficult to carry out than routinized work (Zhou and Hover, 2014)—so engaging in it is an effective way to exceed leaders’ expectations. Indeed, empirical studies have provided evidence to support the positive relationship between follower identification with the leader and creative performance (e.g, J. B. Carnevale, Huang, Credé, Harms, & Uhl‐Bien, 2017; Gu et al., 2015; Qu et al., 2015).

In addition to these effects, the self-orientation model of narcissism (W. Keith Campbell, 1999) suggests that the attraction and identification between highly narcissistic individuals will promote the formation of closer interpersonal relationships between these parties. Similarly, in leader–follower dyads, the follower’s higher identification with the leader facilitates a higher-quality leader–follower interpersonal relationship. Such close and desirable interpersonal relationships can provide followers with more beneficial opportunities and resources, thereby facilitating them to come up with creative ideas and demonstrate better creative performance (J. B. Carnevale et al., 2017; Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012).

Integrating Hypotheses 1 and 2 and the aforementioned rationales, we propose the following hypothesis:

*Hypothesis 3:* Follower identification with the leader mediates the relationship between leader–follower narcissism (in)congruence combinations and follower creative performance.

# Method

## Participants and procedures

To test our hypotheses while avoiding potential contamination by common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), we collected two-wave, two-level, and multi-source data from all 63 branches of a bank group in northern China. These branches share common organizational goals and conduct the same human resources management practices regarding rewards and compensation, task and/or outcome interdependence, and recruitment and selection processes. In this respect, these branches are similar and comparable, suggesting that the study results are not an artifact of cultural or branch-related differences. Moreover, although creative performance is not compulsory in the bank context, employees are encouraged to generate creative ideas to solve business problems, improve work procedures, and better serve customers (D. Liu, Chen, & Yao, 2011; J. Zhou & Shalley, 2003). Initially, the first and second authors delivered lectures to all branch employees and recruited voluntary participants. Then, to ensure a high response rate and adequate data quality, we carried the printed questionnaires directly to a conference room at the bank’s headquarters, distributed the surveys, and collected the completed questionnaires on site. Moreover, we assured all participants that their responses were totally confidential, asked them to respond honestly, and expressed appreciation for their support.

Specifically, at Time 1, we invited all 63 direct leaders and 574 followers to rate their own narcissism. We received completed surveys from 56 direct leaders and 547 followers (89% and 95% response rates, respectively). Approximately one month later, at Time 2, we invited all direct leaders to evaluate their followers’ creative performance and task performance (for supplementary analyses), and asked all followers to assess identification with the leader. Overall, 58 direct leaders and 517 followers returned their surveys (92% and 90% response rates, respectively). All demographic information (i.e., gender, age, education, and dyadic tenure with direct leaders) was objective data obtained from the bank’s human resources department.

After matching the two-wave, two-source data and demographic information using the participants’ unique identification codes, we obtained a usable sample of 421 followers (73% response rate) supervised by 54 direct leaders (86% response rate). The average group size supervised by one leader was 10.99 followers (*s.d.* = 3.57, range = 1 to 20). Among the 54 branches, one branch comprised one follower with one leader, two branches had two followers with one leader, and the rest had more than three followers. The average within-group response rate was 87% (range = 14%–100%). Among the 54 branches, one branch’s within-group response rate was 14%, one branch’s was 25%, and two branches’ was 33%, while the rest had a 50% or higher response rate. As our research focused on leader–follower dyadic interactions, we did not exclude any branch from the data analysis (Z. Zhang et al., 2012). Nevertheless, all results (see Appendix A) supported the hypothesized relationships even when we excluded the three branches with only one or two followers and the four branches whose within-group response rate was lower than 50%.

In the final follower sample, 104 (25%) were male and 370 (88%) had undergraduate or higher degrees. Their average age was 28.97 years (*s.d.* = 3.95), and the average dyadic tenure with their direct leaders was 2.49 years (*s.d.* = 1.43). In the final leader sample, 19 (35%) were male, 50 (93%) had undergraduate or higher degrees, and their average age was 36.37 years (*s.d.* = 5.88).

## Measures

Considering that all materials were provided to participants in Chinese, we followed the standard translation/back-translation procedures for all scales to ensure participants’ proper understanding (Brislin, 1986). All scales had been used in Chinese samples in prior studies.

*Leader narcissism and follower narcissism.* We used the self-report NPI-16 scale from Ames, Rose, and Anderson (2006) to measure leader and follower narcissism. This measure has been widely used in prior studies to capture trait narcissism in Chinese samples (e.g., Joel B. Carnevale, Huang, & Harms, 2018; X. Liu, Mao, Zheng, Ni, & Harms, 2022; X. Liu, X. Zheng, et al., 2022). Participants were presented with 16 pairs of statements and asked to choose the one that optimally fit them. Sample items are “I like to be the center of attention”/“I prefer to blend in with the crowd” and “I like having authority over people”/“I don’t mind following orders.” Narcissism-consistent responses were coded as 1, whereas narcissism-inconsistent statements were coded as 0. The score was computed as the mean across all 16 items (individual assessments ranged from .00 to 1.00; e.g., 3/16), with ranges of .00–.63 for leader narcissism and .00–.81 for follower narcissism. The reliability values of leader narcissism and follower narcissism using Cronbach’s *α* were .71 and .69, respectively.[[3]](#footnote-4)

*Identification with the leader.* We assessed identification with the leader using a six-item scale from Mael and Ashforth (1992), which has been widely used in Chinese samples (e.g., Su, Lyu, Chen, & Zhang, 2020; Z. Wang et al., 2021). A sample item is “When someone criticizes my direct leader, it feels like a personal insult.” Participants responded using a seven-point Likert-type scale (1 = *strongly disagree*; 7 = *strongly agree*). The reliability was .87.

*Follower creative performance.* We measured creative performance using a three-item scale developed by Oldham and Cummings (1996) that has been widely used in prior research focusing on Chinese samples (e.g., Gong, Huang, & Farh, 2009; F. Liu, Li, Taris, & Peeters, 2022). Direct leaders were asked to rate their agreement with the following statements regarding follower creative performance: “The work he/she produces is original and practical (Original and practical work refers to developing ideas, methods, or products that are both totally unique and especially useful to the organization)”; “The work he/she produces is adaptive and practical (Adaptive and practical work refers to using existing information or materials to develop ideas, methods, or products that are useful to the organization)”; and “The work he/she produces is creative (Creativity refers to the extent to which the follower develops ideas, methods, or products that are both original and useful to the organization).” Responses were provided using a seven-point Likert-type scale (1 = *strongly disagree*; 7 = *strongly agree*), and the construct’s reliability in this study was .87.

*Control variables.*The group size and leader and follower demographic information (gender, age, years of schooling, and dyadic tenure) might potentially impact leader–follower interactions, follower identification with the leader, and follower creative performance (Gu et al., 2015; Mao et al., 2021; Z. Zhang et al., 2012); hence, we controlled for these variables. The results remained consistent when we did not include these controls (see Appendix B).

## Analytical strategy

Considering the nested nature of our data, we examined the intraclass correlation coefficients (ICCs) of two outcome variables in our model to measure the proportion of variance in the outcome variables that can be attributed to the group-level factors. The results indicated that ICC1 and ICC2 were .28 and .71 for creative performance, and .06 and .33 for identification with the leader. Both mediating and outcome variables exhibited ICC1 values exceeding the 0.05 (Bliese, 2000), suggesting that a significant amount of variance was due to the differences between groups rather than between individuals, and indicating a need to consider the data’s nestedness (LeBreton & Senter, 2008). For antecedent, our model incorporates congruence components with variables on two distinct levels, namely, leader narcissism as a between-group level variable, and follower narcissism as a within-group level variable. This bifurcation necessitates the use of multi-level modeling as the optimal analytical method.Therefore, following existing studies (e.g., Anand et al., 2022; Z. Zhang et al., 2012), we used cross-level polynomial regression (Jansen & Kristof-Brown, 2005) and response surface modeling (Jeffrey R. Edwards & Parry, 1993) to test our hypotheses on (in)congruence effects. We used the R package to model our data. Specifically, for multi-level modeling, which is central to our analysis, we heavily on the ‘lmerTest’ package (Kuznetsova et al., 2017). This package is effective in handling the complexities of multi-level data. Furthermore, for the presentation and organization of our results, we use the ‘sjPlot’ package (Lüdecke, 2015). The application of these packages provides us with the necessary tools to conduct our analysis with precision and clarity.

First, we created five polynomial terms: leader narcissism (L), follower narcissism (F), leader narcissism squared (L2), follower narcissism squared (F2), and leader narcissism times follower narcissism (L × F). Considering multicollinearity’s potential effect on the results and to facilitate interpretations, we scale-mean-centered L and F and then calculated L2, F2, and L × F (J. R. Edwards, 2002; Jeffrey R. Edwards & Parry, 1993).

The basic equation used in the single-level polynomial regression (control variables omitted, with *Z* as the dependent variable of interest) was as follows:

$Z= b\_{0} + b\_{1} (F) + b\_{2} (L) +b\_{3} (F^{2}) +b\_{4} (F×L) + b\_{5}(L^{2}) +e$ （1）

Under a multilevel framework, we regressed *Z* on the control variables and the five polynomial terms with hierarchical linear modeling (Jansen & Kristof-Brown, 2005; Z. Zhang et al., 2012). This method can account for the nested structure of the data by estimating separate equations for each level of analysis. The cross-level polynomial regression equations were as follows:

Level 1 equation:

$Z= β\_{0} + β\_{1} (F) + β\_{2} (F^{2}) +e$（2）

Level 2 equation:

$β\_{0}= γ\_{00} + γ\_{01} (L) +γ\_{02} (L^{2}) +μ\_{0} $ （3）

$β\_{1}= γ\_{10} + γ\_{11} (L)$$+ μ\_{1}$（4）

$β\_{2}= γ\_{20} +μ\_{2}$ （5）

In these formulas, the coefficients *γ*00, *γ*10, *γ*01, *γ*20, *γ*11, and *γ*02 represent *b*0, *b*1, *b*2, *b*3, *b*4, and *b*5 in formula (1), respectively.

After running the cross-level polynomial regression analysis, we followed Edwards and Parry’s (1993) recommendation to perform response surface modeling, which uses the regression coefficients to plot the three-dimensional response surface. In this visualized graph, leader narcissism (L) and follower narcissism (F) were plotted on the perpendicular horizontal axes, while outcome variables including identification with the leader and creative performance were plotted on the vertical axis (e.g., Matta et al., 2015; Zhang et al., 2012).

To test Hypothesis 1, we needed to examine two key features along the congruence (L = F) and incongruence (L = –F) lines, respectively. The first necessary feature to support the congruence effect is to investigate the curvature of the incongruence line (Edwards and Cable, 2009). Based on the criteria demonstrated in prior methodological papers (e.g., Cohen, Nahum-Shani, & Doveh, 2010; Jeffrey R. Edwards & Parry, 1993; Shanock, Baran, Gentry, Pattison, & Heggestad, 2010) and empirical studies (e.g., Cole, Carter, & Zhang, 2013; Z. Zhang et al., 2012), Hypothesis 1 is supported when the curvature along the incongruence line (calculated as *b*3 – *b*4 + *b*5 or *γ*20 – *γ*11 + *γ*02) is significantly negative (curved downward) using procedures for examining regression coefficients’ linear combinations (Edwards and Parry, 1993). This pattern indicates that the outcome variable (*Z*) decreases when leader narcissism (L) and follower narcissism (F) differ from each other in either direction, thereby supporting Hypothesis 1.

The second feature to provide additional support for the congruence effect is to investigate whether the ridge representing the peak of the response surface runs along the congruence line (Edwards and Cable, 2009). When this condition is met, it indicates that the outcome variable (*Z*) is maximized when leader narcissism (L) and follower narcissism (F) are congruent at every level, thereby further supporting Hypothesis 1. Technically, this feature requires that the first principal axis of the response surface has a slope of *p*11 = 1.0 and an intercept of *p*10 = 0 (Edwards and Cable, 2009). Given that calculations of *p*11 and *p*10 involve nonlinear combinations of polynomial regression coefficients (for more details, see Edwards and Parry, 1993), we used Monte Carlo simulation with 20,000 draws to estimate the 95% confidence intervals (CIs) for *p*11 and *p*10.

To test Hypothesis 2, according to methodological papers (e.g., Cohen et al., 2010; Jeffrey R. Edwards & Parry, 1993; Shanock et al., 2010) and empirical studies (e.g., Cole et al., 2013; Z. Zhang et al., 2012), we should consider the slope (calculated as *b*1 – *b*2 or *γ*10 – *γ*01) along the incongruence line as well as the lateral shift quantity (calculated as [*b*2 – *b*1]/[2 × (*b*3 – *b*4 + *b*5)] or [*γ*01 – *γ*10]/[2 × (*γ*20 – *γ*11 + *γ*02)]). On the one hand, Hypothesis 2 is supported if the slope along the incongruence line is significantly positive using procedures for examining regression coefficients’ linear combinations (Edwards and Parry, 1993). This pattern indicates that the outcome variable (*Z*) decreases when one moves along the incongruence line from lower leader narcissism and higher follower narcissism to higher leader narcissism and lower follower narcissism, thereby supporting Hypothesis 2. On the other hand, the lateral shift quantity indicating the direction and magnitude of the response surface’s lateral shift should be positive to provide additional support for this hypothesis (Atwater, Ostroff, Yammarino, & Fleenor, 1998; Cole et al., 2013). However, previous studies have used different approaches to interpret the result of the lateral shift quantity. Some studies did not formally test the significance level of this quantity (e.g., Atwater et al., 1998; Gibson et al., 2009); Cole et al. (2013) conducted a one-tailed significance test due to a directional hypothesis; and Matta et al. (2015) calculated 95% CIs to examine the significance level. Therefore, our research used a Monte Carlo simulation with 20,000 draws to firstly estimate the 95% CIs; if the result was not statistically significant, we then estimated the 90% CIs for a directional hypothesis.

For the mediation effect (i.e., Hypothesis 3), we followed previous studies by first constructing a weighted linear composite of a block variable combining the five polynomial terms (Jeffrey R. Edwards & Cable, 2009; Z. Zhang et al., 2012) and re-estimating the cross-level polynomial regressions, where the weight was the estimated regression coefficient of the variables in the block. As shown in formula 6, the five quadratic terms were replaced by the block variable, and the regression equation was re-estimated. Using the block variable method will not change either the estimated coefficient of the other variables in the congruence equation or the interpretation of the overall regression equation; hence, the block variable method can better test the direct and indirect effects of (in)congruence influences for a mediation model (Heise, 1972; Igra, 1979; Z. Zhang et al., 2012).

$Block= b\_{1} (F) + b\_{2} (L) +b\_{3} (F^{2}) +b\_{4} (F×L) + b\_{5}(L^{2})$ （6）

Next, we computed the indirect effect as a product of the coefficient of the mediator (i.e., identification with the leader) regressed on the block variable and coefficient of the dependent variable (i.e., creative performance) regressed on the mediator after controlling for the block variable. Finally, we estimated the 95% CIs for the indirect effect using Monte Carlo simulation with 20,000 draws, as suggested by Preacher and Selig (2012).

# Results

## Descriptive statistics

Table 1 presents descriptive statistics for all the study variables—means, standard deviations, correlations, and reliability values.

======= Insert Table 1 about here =======

## Confirmatory factor analysis

To investigate the focal variables’ distinctiveness, we performed a multilevel confirmatory factor analysis (MCFA) using Mplus 8. We used all items as indicators except for leader narcissism and follower narcissism, and we created four parcels for each using the item-to-construct balance method (Little, Cunningham, Shahar, & Widaman, 2002; Williams, Vandenberg, & Edwards, 2009). We used the parceling technique because the items for measuring leader narcissism were relatively large (i.e., 16), and our sample size at level 2 was fairly small (*N* = 54), which resulted in issues of the model converging. Specifically, the four-factor MCFA including three between-level components (i.e., identification with the leader, creative performance, and leader narcissism) and three within-level components (i.e., identification with the leader, creative performance, and follower narcissism) resulted in a good overall fit [*χ*2(124) = 255.62, *p* < .001; CFI = .94; RMSEA = .05; SRMRwithin = .04; SRMRbetween = .15]. Meanwhile, the three-factor model combining follower narcissism and identification with the leader exhibited a poorer model fit with the data [*χ*2(126) = 639.95, *p* < .001; CFI = .75; RMSEA = .10; SRMRwithin = .12; SRMRbetween = .15] compared with the hypothesized four-factor model using a *χ*2 difference test [Δ*χ*2(2) = 384.33, *p* < .001]. The three-factor model combining follower narcissism and creative performance also exhibited a poorer model fit with the data [*χ*2(126) = 533.64, *p* < .001; CFI = .80; RMSEA = .09; SRMRwithin = .09; SRMRbetween = .15] compared with the hypothesized four-factor model [Δ*χ*2(2) = 278.02, *p* < .001]. Therefore, the focal variables in our model were distinct.

## Hypothesis testing

To ensure that a meaningful discrepancy existed (Shanock et al., 2010), we checked the score difference proportion between leader and follower narcissism. We found that 32.41% of the leader narcissism scores were higher than the follower narcissism scores, and 32.41% of the leader narcissism scores were lower than the follower narcissism scores. When the leader narcissism and follower narcissism scores were the same (i.e., the balance group), it accounted for 35.18% of the sample. These distribution results suggest that conducting polynomial regression analyses and examining leader–follower narcissism (in)congruence was meaningful.

Tables 2 and 3 summarize the cross-level polynomial regression results of identification with the leader and creative performance for the leader–follower narcissism combinations. The surface values of both slopes and curvatures along the congruence (L = F) and incongruence (L = –F) lines are presented in Table 4. Meanwhile, based on Edwards and Cable’s (2009) response surface method, Figure 2 visually depicts the effects of the leader–follower narcissism combinations on identification with the leader.

======= Insert Tables 2, 3, 4 and Figure 2 about here =======

*The most beneficial combination.*Hypothesis 1 posits that follower identification with the leader will be maximized when leader and follower narcissism are congruent rather than incongruent. Examining the results of Model 3 in Table 2 and summarizing them in Table 4, we found a significant negative curvature along the incongruence line (curvature = –7.76, *SE* = 2.81, *p* = .006). Meanwhile, the first principal axis had an intercept (*p*10) that was not significantly different from 0 (95% CI = [–.61, .01]) and a slope (*p*11) that was not significantly different from 1.0 (95% CI = [–1.71, 1.80]). Figure 2 also shows a concave surface along the incongruence line where “a line connecting any two points on the surface lies on or below that surface” (Jeffrey R. Edwards & Parry, 1993 1583), indicating that identification with the leader was significantly higher when leader and follower narcissism were congruent rather than incongruent. Moreover, the model fit of Model 3 was superior to that of Model 2 when observing the reduction of the Akaike information criterion (AIC; ΔAIC = –7.97).These findings support Hypothesis 1.

*The most detrimental combination.* Hypothesis 2 predicts that follower identification with the leader will be minimized when leader narcissism is higher than follower narcissism compared with when leader narcissism is lower than or congruent with follower narcissism. Table 2 (Model 3) and Table 4 present a significantly positive slope of the incongruence line (slope = 1.73, *p* < .05) and a positive lateral shift quantity (.11, 95% CI = [–.007, .39],90% CI = [.01, .31] for a directional hypothesis), revealing that identification with the leader declined more sharply when leader narcissism was higher than follower narcissism, compared with when follower narcissism was higher than leader narcissism (Atwater et al., 1998; Cole et al., 2013; Gibson et al., 2009; Matta et al., 2015). Figure 2 also shows that identification with the leader in the back corner (L > F) was lower than that in the front corner (L < F). Additionally, when testing Hypothesis 1, we found that identification with the leader was lower in the incongruence combinations than in the congruence pairings. All these findings support Hypothesis 2.

*Tests of the mediation effect.* Integrating all proposed relationships, Hypothesis 3 posits that follower identification with the leader mediates the relationship between different leader–follower narcissism combinations and follower creative performance. Following (Z. Zhang et al., 2012), we tested the hypothesized indirect effect by adopting the estimated coefficient of identification with the leader regressed on the block variable of the five polynomial terms ($\hat{γ}$ = 1.00, *SE* = .29, *p* < .001; Table 2, Model 4) as the first path, and used the estimated coefficient of creative performance regressed on identification with the leader after controlling for the block variable ($\hat{γ}$ = .12, *SE* = .05, *p* = .027; Table 3, Model 5) as the second path. Then, we used Monte Carlo simulation with 20,000 draws to calculate the 95% CI for the indirect effect (Preacher & Selig, 2012). The results revealed a significant indirect effect of leader–follower narcissism (in)congruence on follower creative performance through follower identification with the leader (indirect effect = .12, *SE* = .07, 95% CI = [.01, .27]). Thus, Hypothesis 3 was also supported.

## Supplementary analyses

First, we used the same analytic strategies to examine the direct impacts of leader–follower narcissism (in)congruence on employee creative performance. Table 3 (Model 3) and Table 4 reveal a significantly negative curvature (curvature = –13.74, *SE* = 4.38, *p* = .002) along the incongruence line, indicating that employee creative performance was higher when leader narcissism and employee narcissism were congruent rather than incongruent. The results present a significantly positive slope of the incongruence line (slope = 4.15, *SE* = 1.52, *p* = .006) and a positive lateral shift quantity (.15, 95% CI = [.04, .45]), suggesting an incongruence effect. Specifically, in Figure 3, follower creative performance was lower in the back corner (L > F) than in the front corner (L < F). Thus, we found similar leader–follower narcissism (in)congruence effects on both identification with the leader and creative performance.

======= Insert Figure 3 about here =======

Second, to alleviate the potential influence of common method variance on the relationship between identification with the leader and creative performance, we asked the leader participants to evaluate their followers’ creative performance at Time 2. This approach is consistent with prior studies on both leader narcissism (e.g., X. Liu, X. Zheng, et al., 2022; Owens, Wallace, & Waldman, 2015) and creativity (e.g., Dong Liu, Liao, & Loi, 2012; X. Zhang & Bartol, 2010). However, our findings might be affected by similarity bias—that is, similarly narcissistic leaders might tend to evaluate similarly narcissistic followers in a positive way irrespective of the measure. To test this possibility, we used leader-rated task performance as the dependent variable to check whether task performance was higher in the leader–follower narcissism congruence situations than in the incongruence conditions (see Appendix C). Specifically, we invited leaders to assess follower task performance using the seven-item scale developed by Williams and Anderson (1991). A sample item is “This follower adequately completes assigned duties” (α = .80). As shown in Table C1 (Model 3), all coefficients of the five polynomial terms were not significant, leading to four non-significant surface test values (Table C2). Thus, follower task performance in the leader–follower congruence condition was not significantly higher than that in the incongruence condition. In summary, similarity bias did not affect our findings.

# Discussion

Drawing upon the self-orientation model of narcissism and narcissistic-tolerance theory (W. Keith Campbell, 1999; Hart & Adams, 2014), we set out to provide a more complete account of *when* and *why* leader and follower narcissism jointly impact follower creative performance via follower identification with the leader. Specifically, we utilized cross-level polynomial regression analyses of two-level, two-wave, and multi-source data to support our hypotheses that follower identification with the leader (1) is maximized when leader and follower narcissism are congruent, (2) is minimized when leader narcissism is higher than follower narcissism, and (3) mediates the joint effects of leader and follower narcissism on follower creative performance.

## Theoretical implications

First, our research contributes to the narcissism literature by simultaneously considering leader and follower narcissism and disentangling their mixed effects on creative performance. Although narcissism and creative performance are intrinsically linked and share several key features (the pursuit of uniqueness, strong need for mastery, and nonconformance with social conventions; (Morf & Rhodewalt, 2001; Raskin, 1980), extant research has produced inconsistent results regarding the impact of leader narcissism (X. Liu, X. Zheng, et al., 2022; Yang et al., 2020; L. Zhou et al., 2019) or follower narcissism (Furnham et al., 2013; Mao et al., 2021; Martinsen et al., 2019; Wallace & Baumeister, 2002) on follower creative performance. Although these studies have advanced our understanding of narcissism’s effects in the workplace and its impact on creativity, they have invariably relied exclusively on *either* a leader-centric *or* follower-centricperspective, which possibly precipitated such mixed results. Deviating from this theoretical perspective and guided by the self-orientation model of narcissism and narcissistic-tolerance theory (W. Keith Campbell, 1999; Hart & Adams, 2014), we consider *both* leader *and* follower narcissism and uncover the most beneficial and most detrimental combinations among different leader–follower narcissism pairings in terms of their effect on creative performance. Using cross-level polynomial regressions to analyze the data, our research reveals that follower creative performance is maximized under the condition of highly narcissistic leaders and highly narcissistic followers, and is minimized when highly narcissistic leaders are accompanied by followers lower on narcissism.

More broadly, these findings provide a novel theoretical account of *when* leader narcissism is beneficial or detrimental to followers. Even though narcissists often appear to be potential “leadership material,” scholars have reached a consensus that leader narcissism is a mixed blessing for followers (for a review, see Braun, 2017). To provide greater clarity in the face of the seemingly contradictory results in the prior literature, much of the recent research concerning narcissism and leadership has examined the contingencies of the effects of leader narcissism, such as leader humility (Owens et al., 2015), leader unfairness perception (H. Liu, Chiang, Fehr, Xu, & Wang, 2017), leader’s visibility to the followers (Nevicka, Van Vianen, De Hoogh, & Voorn, 2018), leader consultation (Joel B. Carnevale et al., 2018), and leader effectiveness (Liu et al., 2022c). Although these studies have made substantial contributions, they have invariably relied on a *leader-centric* perspective to explain when narcissism is a boon or a bane for leaders. In a departure from this theoretical perspective and guided by the self-orientation model of narcissism and narcissistic-tolerance theory (W. Keith Campbell, 1999; Hart & Adams, 2014), we consider *follower narcissism* as a key contingency and uncover the most beneficial and the most toxic postures among different leader–follower narcissism (in)congruence combinations, thereby enriching the leader narcissism research.

Second and relatedly, our research helps in *reconsidering* how highly narcissistic individuals function in interpersonal settings and presents a clearer picture of how leaders and followers with higher or lower levels of narcissism interact in organizational settings. In the literature, narcissism is typically considered one of the so-called Dark Triad personality traits, which are primarily defined by their destructive impact (Harms, 2022; Jakobwitz & Egan, 2006; Paulhus & Williams, 2002). Indeed, individuals higher on narcissism are frequently considered selfish and aggressive, arrogant, exploitative, and haughty toward others (Judge et al., 2006; Lubit, 2002; Resick, Whitman, Weingarden, & Hiller, 2009). Moreover, in two meta-analytic reviews, O'Boyle, Forsyth, Banks, and McDaniel (2012) found that narcissism was a dominant predictor of counterproductive behavior (CWB), and Emily Grijalva and Newman (2015) demonstrated that narcissism was the largest unique determinant of CWB, even after considering the Big Five personality traits. Thus, the conventional wisdom surrounding narcissism in the workplace may predict an *additive* or even *multiplicative effect*,whereby two highly narcissistic individuals together produce more detrimental impacts. Counterintuitively, we found that when leader and follower narcissism are congruent, identification with the leader and creative performance are at their highest.

Also of interest are the results presented in Table 2 (Model 3) and Table 4, which reveal a non-significant slope and curvature of the congruence line for identification with the leader (slope = –1.71, *p* = .092; curvature = –4.52, *p* = .083). These results indicate that levels of identification with the leader were similarly high when leader and follower narcissism were congruent at higher and lower levels. These findings are reasonable because individuals lower on narcissism are interpersonally sensitive, care more about relational closeness, and are more likely to pursue interpersonal intimacy (W. K. Campbell et al., 2006; W. K. Campbell & Foster, 2007). Thus, when both leaders and followers possess lower narcissism levels, they are more likely to share similar goals and values, and to develop high-quality relationships (Graen & Uhl-Bien, 1995); in essence, followers with lower narcissism tend to identify more closely with leaders who are also lower on narcissism. These findings suggest that it is not the case that highly narcissistic individuals do not care interpersonal relationships, but rather that they are more likely to develop psychological bonds with certain individuals such as highly narcissistic leaders. Moreover, if the leader is not high in narcissism, follower narcissism may alleviate the potential negative influence of incongruence on follower identification with the leader and creative performance. Therefore, our findings complement traditional views of narcissism and provide novel insights into narcissistic interactions in interpersonal settings.

Third, this study unpacks how follower identification with the leader can be a critical mediating mechanism that helps account for how leader narcissism interacts with follower narcissism to influence follower creative performance. Extant research has provided limited information on the mediating pathways underlying the effects of leader/follower narcissism. Specifically, only three studies so far have explicitly sought to uncover the mediating mechanisms that act beneath the impacts of leader narcissism on team or follower creative performance—namely, team information search effort (L. Zhou et al., 2019), team information elaboration (Z. Liu et al., 2021), and cognitive dependency (Yang et al., 2020). Regarding the impact of follower narcissism on creative performance, only Mao et al. (2021) have empirically explored creative self-efficacy as the underlying mechanism. These studies, while mainly examining the cognitive mechanisms, have nevertheless overlooked other important pathways—specifically, relational pathways. Our study is based on the core idea that highly narcissistic individuals are more likely to build and maintain interpersonal relationships with other highly narcissistic individuals as a means to maintain or enhance the positivity of their agentic self-concepts (W. Keith Campbell, 1999; W. K. Campbell & Green, 2007; Hart & Adams, 2014); we posited and found that follower identification with the leader, which highlights the impacts of leader–follower interpersonal interactions, is a key neglected mediator that transmits the influence of leader or follower narcissism to follower creative performance.

Fourth, by empirically examining the influences of leader–follower narcissism (in)congruence on follower identification with the leader, our research not only integrates and confirms the core elements of the self-orientation model of narcissism (Campbell, 1999) and narcissistic-tolerance theory (Hart and Adams, 2014), but also brings new insights to these theories. On the one hand, our study is the first to apply these theories to investigate leader–follower dyadic relationships in organizational settings, rather than romantic relationships or general interpersonal settings. Applying theories in different settings is an important way to verify the core ideas of those theories and enlarge their application scope. On the other hand, our research advances the self-orientation model of narcissism and narcissistic-tolerance theory by revealing the asymmetrical incongruence effects in the leader–follower dyadic interactions—that is, the more detrimental effects on follower identification with the leader that occur when leader narcissism is higher than follower narcissism, compared with when leader narcissism is lower than follower narcissism. This asymmetrical incongruence effect has not been discussed in the context of these two theories, and thus provides important extensions to them.

## Practical implications

Our work also has several practical implications. First, organizations should develop a more balanced view of the mixed effects of narcissism on creative performance. On the one hand, our work reminds practitioners of the potentially detrimental impacts of narcissism in the workplace. We found that in situations where the leader is more narcissistic than the follower, both follower identification with the leader and creative performance are significantly impaired. On the other hand, our findings suggest that narcissism has the potential to benefit organizations. We found that when the leader and the follower are both higher on narcissism, follower identification with the leader and creative performance are at their highest compared with other scenarios. Considering that narcissism is increasingly prevalent in the modern workplace (Maccoby, 2000; Rosenthal & Pittinsky, 2006; J. M. Twenge, Campbell, Hoffman, & Lance, 2010), organizations can help leaders and followers become more aware of their own levels of narcissism, recognize the potential dysfunctions associated with this trait, and offer suggestions for managing their own behaviors to leverage the bright side of narcissism and avoid its dark side. For instance, organizations might help leaders and followers evaluate their own narcissism level using a validated instrument that is also appropriate for use in selection and training contexts (Harms, 2022). In addition to self-rating, peer assessments (e.g., followers rate the leader’s narcissism, the leader rates followers’ narcissism) might be necessary because individuals with higher levels of narcissism might be disinclined to explicitly describe themselves as being narcissistic (but see also Carslon, 2013; Van der Linden and Rosenthal, 2016). Organizations can also provide regular courses or coaching sessions that explain the key features of a narcissistic personality to help highly narcissistic individuals understand that not all individuals share the same values and perceptions of narcissistic behavior. Fostering such a balanced understanding of narcissism may enlighten leaders and followers on the mindsets of their coworkers, and help address and avoid misunderstandings and interpersonal resentment.

Second, if possible, organizations may want to consider the relative levels of narcissism in both leaders and followers when arranging their work groupings. A key consideration is avoiding pairing followers with lower narcissism levels with highly narcissistic leaders. Our research suggests that this is likely to be a particularly toxic combination, as followers lower on narcissism may be less able to tolerate highly narcissistic leaders who are arrogant, exploitative, hostile, and selfish, thereby reducing such followers’ identification with the leader and creative performance. If such circumstances are unavoidable, we suggest that organizations make available support opportunities and resources to followers. That said, whenever possible, organizations concerned about creative performance and innovative outcomes should attempt to pair highly narcissistic followers with highly narcissistic leaders. In this way, the organization can leverage the potential benefit of narcissism by facilitating highly narcissistic followers’ identification with the leader and thereby improving their creative performance, which can benefit the organization’s competitive advantage and sustainable development (for reviews, see Anderson et al., 2014; Tierney, 2008; J. Zhou & Hoever, 2014).

However, organizations should also be aware that having several highly narcissistic members in a team may exacerbate an employee’s competitive identity (which causes the employee to compare himself/herself with others), intensify team and organizational competition, and engender greater relational conflicts among coworkers (W Keith Campbell & Foster, 2002; X. Liu, J. Y. Mao, et al., 2022). Such a fractious atmosphere may ultimately impair team and organizational effectiveness in domains other than creative performance. Given this risk, organizations should be cautious regarding the excessive competition and disharmony within teams that may arise in such groupings.

## Limitations and future research

Our study has several limitations, some of which suggest fruitful directions for future research. First, although we collected two-level, two-wave, and multi-source data, we could not draw causal inferences because of the field survey design. To address this limitation, future research may conduct lab experiments to test our hypothesized relationships. Specifically, future studies may follow the experimental design in Goncalo et al. (2010) but assign specific roles (i.e., leaders and followers) to participants, and test the changes in creative performance.

Second, although we collected two-wave and multi-source data, controlled for factors that potentially influence the results, and conducted supplementary analyses to test rating bias, obtaining objective or peer ratings of creative performance—to further eliminate similarity bias’s potential influence on the results—would be preferable. We urge future researchers to seriously consider this issue and collect data from various sources (e.g., objective or peer rating data).

Third, although our theorizing is not culturally bound, concerns regarding our findings’ generalizability remain. Emerging studies have used Chinese samples to examine the impacts of leader narcissism (e.g., Huang, Krasikova, & Harms, 2020; X. Liu, X. Zheng, et al., 2022) and follower narcissism (e.g., X. Liu, J. Y. Mao, et al., 2022). Additionally, we measured narcissism using the NPI-16 scale, a tool widely used in both Western and Eastern contexts (Ames et al., 2006; Joel B. Carnevale et al., 2018). We acknowledge, however, that the high level of power distance and collectivism featured in Chinese culture (Hofstede, 1980) may result in followers’ greater tolerance of a narcissistic leader in this setting (Joel B. Carnevale et al., 2018). Moreover, collectivistic cultural norms may have resulted in reduced endorsements of narcissism and, therefore, restricted the range of this variable. Range restriction of the focal variables may be further impacted by utilizing abbreviated scales (Credé, Harms, Niehorster, & Gaye-Valentine, 2012; Smith, McCarthy, & Anderson, 2000). Thus, the estimates in our study may be overly conservative. Further research is needed to clarify whether the findings would differ in other cultural contexts.

Fourth, our research primarily adopts a dyadic perspective to examine the interactions in leader–follower dyads. However, the reality is that leaders usually supervise more than one follower. Consequently, it is likely that even if a highly narcissistic leader is desirable for a highly narcissistic follower, that leader may still have detrimental effects on several, if not most, of the followers. Future studies are urged to examine the impacts of leader narcissism on team-level outcomes, such as team performance and team helping. Doing so would foster a deeper understanding of the bright and dark sides of leader narcissism in work teams.

Finally, although our study and much of the existing destructive leadership literature focus on narcissism, several other dark traits warrant further investigation. These explorations may ultimately reveal different patterns when leader personality and follower personality are considered simultaneously (Hogan & Kaiser, 2005; Spain, Harms, & LeBreton, 2014).

## Conclusion

Integrating the self-orientation model of narcissism and narcissistic-tolerance theory (W. Keith Campbell, 1999; Hart & Adams, 2014), our research provides a finer-grained and more comprehensive account of *when* and *why* narcissism is beneficial or detrimental to creative performance by simultaneously considering both leader and follower narcissism. Cross-level polynomial regression analyses reveal the importance of considering leader–follower narcissism (in)congruence. Our findings suggest that the optimal condition is when leader–follower narcissism is congruent, whereas the condition in which leader narcissism is higher than follower narcissism is the most detrimental in terms of follower identification with the leader and creative performance. Future work can further investigate the relationship between narcissism and creative performance, and explore the role of narcissism in interpersonal relationships at work.

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Table 1

*Means, standard deviations, correlations, and reliability values of studied variablesa*

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1. Leader narcissism  | (*.71*) | .12(.41) | –.35\*(.01) | .14(.30) | –.05(.70) | –.02(.88) | –.30\*(.03) | –.02(.86) | –.01(.95) | .01(.93) | .15(.27) | –.28\*(.04) |
| 2. Leader gender | — | — | –.21(.12) | .18(.19) | –.09(.53) | .21(.14) | –.001(.99) | .16(.25) | .34\*(.01) | .03(.82) | –.003(.98) | –.003(.98) |
| 3. Leader age | — | — | — | –.21(.12) | .10(.48) | –.01(.93) | .24(.08) | .21(.13) | –.07(.61) | .05(.74) | .08(.56) | .17(.22) |
| 4. Leader schooling year | — | — | — | — | .27\*(.049) | –.02(.87) | –.16(.24) | –.11(.40) | –.03(.84) | –.17(.22) | .42\*\*(.002) | –.20(.14) |
| 5. Group size | — | — | — | — | — | –.44\*\*\*(<.001) | –.24(.08) | .01(.93) | –.33\*(.02) | –.29\*(.04) | .14(.30) | .14(.30) |
| 6. Follower narcissism | — | — | — | — | — | (*.69*) | .33\*(.01) | .24(.08) | .37\*\*(.005) | –.14(.31) | –.05(.74) | –.09(.53) |
| 7. Follower identification with the leader | — | — | — | — | — | .07(.16) | (*.87*) | .07(.62) | .27(.05) | –.18(.20) | –.25(.07) | –.08(.56) |
| 8. Follower creative performance  | — | — | — | — | — | .29\*\*\*(<.001) | .15\*\*(.002) | (*.87*) | .12(.40) | –.15(.28) | –.09(.52) | .18(.18) |
| 9. Follower gender | — | — | — | — | — | .18\*\*\*(<.001) | .07(.13) | .03(.54) | — | .15(.29) | –.29\*(.04) | .03(.82) |
| 10. Follower age | — | — | — | — | — | –.20\*\*\*(<.001) | –.06(.23) | –.05(.27) | –.05(.33) | — | .01(.93) | .24(.08) |
| 11. Follower schooling year | — | — | — | — | — | .02(.62) | .03(.49) | .05(.26) | –.04(.44) | –.05(.33) | — | –.09(.54) |
| 12. Dyadic tenure | — | — | — | — | — | –.06(.26) | –.04(.44) | –.05(.30) | .04(.40) | .23\*\*\*(<.001) | –.09(.07) | — |
| Mean (individual level) | — | — | — | — | — | .29 | 5.12 | 4.88 | .25 | 28.97 | 15.93 | 2.49 |
| *SD* (individual level) | — | — | — | — | — | .17 | .91 | 1.18 | .43 | 3.95 | .52 | 1.43 |
| Mean (group level) | .30 | .35 | 36.37 | 16.20 | 9.41 | .30 | 5.17 | 4.88 | .29 | 29.10 | 15.89 | 2.38 |
| *SD* (group level) | .16 | .48 | 5.88 | 1.34 | 3.95 | .08 | .44 | .72 | .27 | 2.19 | .29 | .94 |

*Note. N* = 421 at the individual level (below the diagonal); *N* = 54 at the group level (above the diagonal). Male = 1, female = 0. Cronbach’s α values for the variables are shown in italics and enclosed in parentheses along the diagonal. Exact *p* values are reported in parentheses below each correlation.

\* *p* < .05, \*\* *p* < .01, \*\*\* *p* < .001 with two-tailed testing.

Table 2. *Results of cross-level polynomial regressions for* *identification with the leader*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variables | Model 1 | Model 2 | Model 3 | Model 4 |
| *Est.* | *SE* | *t* | *p* | *Est.* | *SE* | *t* | *p* | *Est.* | *SE* | *t* | *p* | *Est.* | *SE* | *t* | *p* |
| (Intercept) | 4.40\*\* | 1.55 | 2.85 | .005 | 4.28\*\* | 1.53 | 2.79 | .005 | 3.42\* | 1.54 | 2.23 | .026 | –.00  | 1.96 | –.00 | 1.000 |
| Leader gender | –.07 | .11 | –.63 | .530 | –.06 | .11 | –.52 | .606 | –.08  | .10 | –.74 | .462 | –.08  | .10 | –.74 | .458 |
| Leader age | .02\* | .01 | 2.49 | .013 | .02\* | .01 | 1.98 | .048 | .02\* | .01 | 2.10 | .036 | .02\* | .01 | 2.17 | .030 |
| Leader schooling year | .04 | .05 | .78 | .439 | .04  | .05 | .84 | .400 | .08  | .05 | 1.73 | .084 | .08  | .04 | 1.77 | .078 |
| Follower gender | .18 | .10 | 1.74 | .083 | .15  | .10 | 1.45 | .147 | .14  | .10 | 1.32 | .187 | .14  | .10 | 1.34 | .182 |
| Follower age | –.02 | .01 | –1.42 | .158 | –.01  | .01 | –1.18 | .237 | –.01  | .01 | –1.22 | .221 | –.01  | .01 | –1.25 | .210 |
| Follower schooling year | –.002 | .09 | –.02 | .982 | .01  | .09 | .09 | .929 | .02  | .09 | .28 | .782 | .02  | .09 | .28 | .780 |
| Dyadic tenure | –.02 | .03 | –.51 | .608 | –.02  | .03 | –.67 | .503 | –.02  | .03 | –.55 | .583 | –.02  | .03 | –.56 | .579 |
| Group size | –.02 | .02 | –1.12 | .262 | –.02  | .02 | –1.15 | .250 | –.02  | .01 | –1.15 | .250 | –.02  | .01 | –1.18 | .238 |
| Follower narcissism (F) |  |  |  |  | .28  | .26 | 1.07 | .285 | .01  | .56 | .02 | .983 |  |  |  |  |
| Leader narcissism (L) |  |  |  |  | –.50  | .31 | –1.61 | .108 | –1.72\* | .75 | –2.28 | .023 |  |  |  |  |
| F2 |  |  |  |  |  |  |  |  | –1.91  | 1.22 | –1.56 | .120 |  |  |  |  |
| F × L |  |  |  |  |  |  |  |  | 1.62  | 1.53 | 1.06 | .289 |  |  |  |  |
| L2 |  |  |  |  |  |  |  |  | –4.23\* | 1.77 | –2.39 | .017 |  |  |  |  |
| Block |  |  |  |  |  |  |  |  |  |  |  |  | 1.00\*\*\* | .29 | 3.50 | <.001 |
| Pseudo-*R*2 | .07 | .07 | .08 | .08 |
| AIC | 1122.81 | 1125.22 | 1117.25 | 1109.25 |
| ΔAIC | — | 2.41 | –7.97 | –8.00 |
| *χ*2 | 11.92 | 3.60 | 8.00 | 23.48 |
| *F* value | .49 | .67 | .73 | .98 |
| *Note. N* = 421 at the individual level; N = 54 at the group level. Unstandardized regression coefficients are reported. *\*p* < .05, *\*\*p* < .01, *\*\*\*p* < .001 with two-tailed testing. |

Table 3. *Results of cross-level polynomial regressions for creative performance*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variables | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
| *Est.* | *SE* | *t* | *p* | *Est.* | *SE* | *t* | *p* | *Est.* | *SE* | *t* | *p* | *Est.* | *SE* | *t* | *p* | *Est.* | *SE* | *t* | *p* |
| (Intercept) | 4.12  | 2.19 | 1.88 | .061 | 4.77\* | 2.12 | 2.26 | .025 | 3.31  | 2.13 | 1.55 | .122 | 2.90  | 2.14 | 1.36 | .175 | –.90  | 2.19 | –.41 | .681 |
| Leader gender | .28  | .21 | 1.32 | .187 | .29  | .21 | 1.35 | .177 | .28  | .21 | 1.32 | .187 | .30  | .21 | 1.39 | .165 | .23  | .20 | 1.16 | .246 |
| Leader age | .03  | .02 | 1.51 | .132 | .02  | .02 | 1.26 | .207 | .03  | .02 | 1.40 | .163 | .02  | .02 | 1.27 | .207 | .02  | .02 | 1.42 | .157 |
| Leader schooling year | –.10  | .08 | –1.15 | .251 | –.13  | .08 | –1.59 | .113 | –.06  | .09 | –.68 | .500 | –.07  | .09 | –.76 | .447 | –.03  | .08 | –.32 | .751 |
| Follower gender | .07 | .12 | .59 | .555 | –.06  | .11 | –.55 | .583 | –.06  | .11 | –.55 | .585 | –.07  | .11 | –.67 | .506 | –.08  | .11 | –.73 | .466 |
| Follower age | –.02  | .01 | –1.15 | .251 | –.001 | .01 | –.08 | .932 | –.003 | .01 | –.26 | .796 | –.002 | .01 | –.18 | .855 | –.002 | .01 | –.01 | .995 |
| Follower schooling year | .10  | .10 | .96 | .338 | .09  | .10 | .92 | .358 | .10  | .10 | 1.08 | .279 | .10 | .09 | 1.04 | .299 | .10  | .10 | .98 | .327 |
| Dyadic tenure | –.01  | .04 | –.25 | .804 | –.02  | .04 | –.42 | .678 | –.01  | .04 | –.35 | .729 | –.01  | .04 | –.30 | .762 | .00  | .04 | .05 | .959 |
| Group size | .02  | .03 | .56 | .573 | .03  | .03 | 1.26 | .209 | .04  | .03 | 1.28 | .201 | .04  | .03 | 1.36 | .174 | .03  | .03 | 1.31 | .190 |
| Follower narcissism (F) |  |  |  |  | 1.60\*\*\* | .35 | 4.55 | <.001 | 1.07  | .66 | 1.61 | .107 | 1.08  | .65 | 1.66 | .099 |  |  |  |  |
| Leader narcissism (L) |  |  |  |  | .15  | .61 | .24 | .810 | –3.08\* | 1.43 | –2.15 | .032 | –2.87\* | 1.44 | –1.99 | .047 |  |  |  |  |
| F2 |  |  |  |  |  |  |  |  | –2.51  | 1.46 | –1.72 | .087 | –2.23  | 1.46 | –1.53 | .128 |  |  |  |  |
| F × L |  |  |  |  |  |  |  |  | 1.75  | 2.06 | .85 | .397 | 1.53  | 2.03 | .75 | .451 |  |  |  |  |
| L2 |  |  |  |  |  |  |  |  | –9.48\*\* | 3.50 | –2.71 | .007 | –8.99\* | 3.52 | –2.55 | .011 |  |  |  |  |
| Identification with the leader |  |  |  |  |  |  |  |  |  |  |  |  | .12\* | .05 | 2.35 | .019 | .12\* | .05 | 2.22 | .027 |
| Block  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.09\*\*\* | .16 | 6.65 | <.001 |
| Pseudo-*R*2 | .28 | .41 | .46 | .47 | .37 |
| AIC | 1277.80 | 1239.37 | 1230.83 | 1227.42 | 1232.63 |
| ΔAIC | — | –38.43 | –8.54 | –3.41 | 5.21 |
| *χ*2 | 7.81 | 44.43 | 16.54 | 5.41 | 56.98 |
| *F* value | .33 | 5.00 | 1.39 | 1.83 | 1.93 |
| *Note. N* = 421 at the individual level; *N* = 54 at the group level. Unstandardized regression coefficients are reported. *\*p* < .05, *\*\*p* < .01, *\*\*\*p* < .001 with two-tailed testing. |

Table 4.

*Surface values for effects of leader–follower narcissism (in)congruence on follower identification with the leader and follower creative performance*

| Surface parameters | Value | *SE* | *t* | *p* |
| --- | --- | --- | --- | --- |
| *Identification with the leader* |  |  |  |  |
| Congruence line: slope | –1.71 | 1.02 | –1.69 | .092 |
| Congruence line: curvature | –4.52 | 2.61 | –1.73 | .083 |
| Incongruence line: slope | 1.73 | 0.85 | 2.03 | .042 |
| Incongruence line: curvature | –7.76 | 2.81 | –2.76 | .006 |
| *Creative performance* |  |  |  |  |
| Congruence line: slope | –2.01 | 1.64 | –1.23 | .219 |
| Congruence line: curvature | –10.24 | 4.33 | –2.36 | .018 |
| Incongruence line: slope | 4.15 | 1.52 | 2.74 | .006 |
| Incongruence line: curvature | –13.74 | 4.38 | –3.13 | .002 |

*Note.* Two-tailed testing was used.

Follower creative performance

(T2L)

Follower narcissism

(T1F)

High Leader Narcissism

Low Follower Narcissism

Leader narcissism

(T1L)

Identification with the leader

(T2F)

*Figure 1.* Theoretical model

*Note.* T1L = Time 1, leader-rated; T1F = Time 1, follower-rated; T2L = Time 2, leader-rated; T2F = Time 2, follower-rated.



*Figure 2.* Leader–follower narcissism (in)congruence effects on identification with the leader

*Note.* The dashed line indicates the congruence line; the solid line indicates the incongruence line.



*Figure 3.* Leader–follower narcissism (in)congruence effects on creative performance

*Note.* The dashed line indicates the congruence line; the solid line indicates the incongruence line.

1. Our research focuses on grandiose (or overt) narcissism rather than vulnerable (or covert) narcissism which reflects a more clinical form of narcissism characterized by high levels of neuroticism and hidden insecurities (see Miller et al., 2018). [↑](#footnote-ref-2)
2. For congruence combinations, we pay particular attention to the condition wherein leader narcissism is congruent with follower narcissism at a higher rather than lower level. In the lower situation, both leaders and followers exhibit lower narcissism, so the inconsistent findings on the relationship between leader narcissism or follower narcissism and follower creative performance cannot be explained theoretically. Meanwhile, the self-orientation model of narcissism and narcissistic-tolerance theory, as our guiding frameworks, do not discuss the pair of individuals both having lower narcissism. However, in the empirical examination, we compare this condition with the other conditions to provide further evidence. [↑](#footnote-ref-3)
3. A thorough literature review of prior survey research on narcissism revealed that the Cronbach’s *α* of our measure was within the commonly observed range. For example, the original paper elucidating the development of the NPI-16 measure (Ames et al., 2006) reported five studies with α ranging from .65 to .72 (i.e., .72, .68, .69, .69, .65 across Studies 1–5). Papers that collected field survey data in China reported comparable reliability scores for the NPI-16 measure; this score was .72 in Huang et al. (2020), .70 in Liu et al. (2022b), and .71 in Liu et al. (2022c). Therefore, we concluded that our measure’s reliability was acceptable. [↑](#footnote-ref-4)