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Growing Followers: Exploring the Effects of Leader Humility on Follower Self-Expansion, Self-Efficacy, and Performance

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ABSTRACT

Although the effectiveness of leader humility has been well documented, our understanding

of how leader humility influences followers psychologically is limited. Surpassing a mere

leader-centric understanding of the leader influence process by more fully understanding how

leadership behavior shapes followers psychologically has been identified as a critical need by

leadership scholars. Drawing on self-expansion theory, we argue that leader humility triggers

followers' self-expansion and that this psychological change enhances followers' self-efficacy, which in turn contributes to followers' task performance. We also argue that the relationship between leader humility and followers' self-expansion is strengthened when leaders and followers are similar in age and gender. Using a time-lagged research design with responses from 256 leader-follower dyads, we found support for our proposed model. We discuss the theoretical implications for our findings and suggest areas for future research.

Keywords: leader humility, self-efficacy, self-expansion, task performance

INTRODUCTION

In recent years, organizational researchers have paid greater attention to the implications of humility in leadership studies (see a recent review by Nielsen and Marrone, in press). Leader humility is defined as an interpersonal characteristic rooted in self-transcendence, which is manifested by a willingness to view oneself accurately, an appreciation of others' strengths and contributions, and an openness to new insights, feedback, and advice (Owens et al., 2013). A growing number of empirical studies have reported that leader humility has a positive impact on follower work engagement and job satisfaction (Owens et al., 2013), team performance (Chiu et al., 2016), and firm performance (Ou et al., 2018). In a recent study, Ou et al. (2018) further report that CEOs' humble leadership style effectively promotes behavioral integration in their top management teams—even after controlling for their charismatic leadership behavior, one of the most dominant leadership styles identified by literature (Dinh et al., 2014). Despite this empirical support, various researchers (e.g., Crossan et al., 2017; Ou et al., 2017; Owens and Hekman, 2016) have cautioned that our understanding of leader humility and its implications in organizations is limited in several important ways.

First, leader humility and other positive leadership approaches—e.g., transformational, ethical, servant, and authentic leadership—have been shown to foster constructive work attitudes, enhance motivation, and improve performance (Avolio, 2007; Avolio and Gardner, 2005; Brown and Treviño, 2006; Hannah et al., 2009; Nelson and Cooper, 2007; Ou et al., 2018; Wang et al., in press). However, we understand little about whether or how these approaches shape components of followers' deeper psychology, such as their identity or sense of self (Van Knippenberg et al., 2004). This is important because not only has research in positive leadership areas been overwhelmingly leader-centric (Ehrhart and Klein, 2001; Meindl, 1995), but the way in which followers view and define themselves is the psychological foundation that shapes their subsequent attitudes and behaviors (Alvesson and Willmott, 2002; Van Knippenberg et al., 2004). As the "totality of one's self-construal" (Weinreich, 1986, p. 317), identity is the fulcrum upon which perspectives, desires, attitudes, and ultimately behaviors hinge. While positive leadership theories typically propose deep-level, transformative changes in followers, existing research most often explores its effects on surface-level job attitudes (e.g., job satisfaction, organizational commitment, job engagement). We believe leader humility holds unique potential for illuminating the impact of leadership on follower sense of self or identity because this approach to leading is not only proposed to be "follower centered" (Owens and Hekman, 2016), but also uniquely entails modeling self-transcendence, legitimizing follower growth and development, and facilitating follower role expansion. We integrate these influencing mechanisms to develop theory about how humble leadership can explain deep-level, identity-based changes in followers.

Second, multiple studies have expressed the need for researchers to explore the boundary conditions of leader humility's influence (e.g., Ou et al., 2014a; Owens and Hekman, 2012). But, with sparse exceptions (e.g., Chiu et al., 2016; Daniels et al., 2014; Ou et al., 2014a; Ou et al., 2017), conditions that strengthen or mitigate the influence of leader humility remain underexplored. Along the theme of understanding the follower's role in the humble leadership process, we do not yet understand whether and how follower demographic similarity to the leader may influence followers' receptiveness to displays of leader humility. Lack of investigation into construct boundary conditions seriously limits the theoretical development and practical implications of leader humility (Ou et al., 2017).

The present study is designed to address these theoretical gaps. We rely on self-expansion theory (Aron et al., 1991) to undergird our model and justify how leader humility invokes a change in followers' self-identity that eventually enhances followers' work performance. Self-expansion is a psychological process through which an individual (e.g., a follower) expands his or her self-identity to include a target (e.g., a leader) in the self (Aron and Aron, 1986; Aron et al., 1991). We focus on follower self-expansion to study leader humility because of its benefits in advancing leadership literature, which were highlighted by Dansereau et al. (2013). First, self-expansion offers a fundamental explanation about the change process of followers' self-identity, during which followers translate the observed leader traits and behaviors into their own attitudes and behaviors. Through applying the self-expansion approach to exploring leader humility, we offer unique theoretical insight into why leader humility can be conceptualized as an effective leadership style, echoing the call for research about leader humility raised by Dansereau et al. (2013). Second, self-expansion provides a theoretical framework to explain the boundary conditions of leadership constructs. As such, the theory provides solid justification regarding when leader humility is more (or

less) influential due to the impact of boundary factors on followers' self-expansion processes. Specifically, since leader and follower characteristics are common boundary conditions altering the association between leadership constructs and self-expansion (Dansereau et al., 2013), and since interpersonal similarity is a key driver for promoting the probability of self-expansion (Aron and Aron, 1996), we argue that leader humility should better arouse follower self-expansion when leaders and followers are similar in specific personal characteristics.

In the present study, we link leader humility to follower self-expansion by addressing (1) how leader humility can elicit self-expansion as the fundamental self-identity change in followers to enhance their work performance, and (2) how its effect on self-expansion is strengthened by leader-follower similarities. More precisely, we first anticipate that, due to its follower-centered focus and leader-follower role reversal nature, leader humility bolsters follower willingness and ability to forge close interpersonal relationships with leaders, and thus triggers the desirability and probability of self-expansion among followers. Based on self-expansion theory (Aron et al., 1991), after expanding themselves to include the leader, followers become more confident in completing tasks—i.e., they have a higher level of self-efficacy (Dys-Steenbergen et al., 2016)—and eventually deliver increased performance.

Second, we anticipate that leader-follower demographic similarity could amplify the impact of leader humility on followers' self-expansion for multiple reasons. Self-expansion theory suggests that interpersonal similarity is a powerful indicator for people in judging the likelihood of self-expansion, as interpersonal dissimilarity may discourage their willingness to self-expand because they anticipate difficulties in incorporating dissimilar others (Aron et al., 1991). Aron et al. (2006) further argue that demographic similarity will outweigh the

influence of other forms of social similarity on the self-expansion process because intimate

relationships usually start from judgements of biographical information (e.g., demographics;

Altman and Taylor, 1973). Because the received leadership influence will increase in validity

and believability in the eyes of followers if it is from a similar source (i.e., the

demographically similar leader; Cornelis et al., 2011), interpersonal demographic similarity

will make followers more responsive to the humble behaviors displayed by their leader, and

thus magnify the impact of humble leadership.

Our research aims to contribute to literature on humility, leadership, and self-

expansion in three ways. First and foremost, by introducing the self-expansion perspective,

our research sheds additional light on the humble leadership influence process by explaining

its psychological effects on followers' self-identities, which in turn shapes their effectiveness

or performance. Second, our research identifies the moderating role of demographic

similarity, which shapes how effectively leader humility elicits followers' self-expansion.

This represents a novel boundary condition of leader humility's influence on followers.

Finally, through linking leader humility to self-expansion theory, our research offers a

theoretical justification for integrating humble leadership with traditional and contemporary

leadership approaches, answering the call of Dansereau et al. (2013). The overall theoretical

model is presented in Figure 1.

THEORETICAL BACKGROUND AND HYPOTHESES

Leader Humility

Leader humility is conceptualized as an interpersonal attribute that helps organizational

leaders cope with their social surroundings by displaying high levels of self-awareness, other-

centered orientation, and teachability (Owens et al., 2013). The term *interpersonal attribute*

reflects the behavioral view of personality (e.g., extroversion; Grant et al., 2011), which suggests that behaviors are the building blocks of traits and that traits are established through behavioral consistency (see Buss and Craik, 1983; Fleeson, 2001). Previous studies have summarized three important behavioral tendencies of humble leaders (Owens et al., 2013). First, humble leaders are willing to accurately reflect on themselves, or objectively evaluate themselves, and therefore have an accurate, non-defensive, objective self-view (Exline et al., 2004; Tangney, 2000). Second, they publicly display appreciation of others' (especially followers') strengths and contributions without feeling threatened or offended (Exline et al., 2004). Third, they are open to ideas, advice, and information and express a high interest in learning from others (Tangney, 2000).

As mentioned, leader humility is unique compared to other leadership styles in the way it legitimizes growth, expands followers' roles, and models self-transcendence. Each of these documented influence mechanisms is relevant to follower self-concept and development. First, leader humility is distinctive in legalizing followers' growth and development. While transformational leadership elevates follower motivation to a higher unifying purpose, servant leadership builds trust and enhances follower selflessness, and ethical leadership reinforces ethical behavior in followers, humble leadership models growth (Owens and Hekman, 2012). Grounded theory also reveals that when leaders model growth by expressing humility, followers feel their own development and growth is legitimized (Owens and Hekman, 2012). Though initial qualitative statements and foundational theory appear to infer that this novel influence mechanism of modeling and legitimizing growth mainly refers to work-related growth, our theorized model extends the understanding of this influence mechanism to apply more generally to self-growth, or growth of the self-concept, which we explain below.

In addition, humility is unique in its ability to facilitate follower role expansion. Undergirded by grounded theory statements (Owens and Hekman, 2012) and empirical studies (see Chiu et al., 2016), humble leadership fosters dynamic, fluid, and shared leadership influence by initiating leader-follower role reversals. In this process, the follower's role expands as the leader solicits leadership influence from the follower. This effect also carries over to interactions with other employees (Chiu et al., 2016; Owens and Hekman, 2016). We propose that as followers exert more leader-like influence in the leader-follower relationship, they will be more likely to incorporate the leader into their own identity, representing the self-expansion process.

Leader humility is also theoretically centered on the concept of self-transcendence, which reflects seeing and pursuing worth and value beyond the self (Morris et al., 2005; Ou et al., 2014b). As leaders model self-transcendence by exhibiting humble behaviors, they legitimize to followers the idea that the self is a fluid and malleable concept and that there are valuable perspectives, skills, and characteristics not currently part of the self—but that may become part of it. This lays important psychological groundwork for the process of self-expansion to occur.

Humble Leadership: The Self-Expansion Perspective

Self-expansion theory (Aron and Aron, 1986, 1996) describes why individuals are eager to develop close relationships with others and how these interpersonal relationships are built. Humans have a basic motivation to develop close interpersonal relationships to gain material, informational, and social resources from others (Aron et al., 2001), and self-expansion is one effective strategy for developing such intimate bonds and securing those resources (Dys-Steenbergen et al., 2016). Per Aron and Aron (1986), self-expansion is a psychological

change or process through which an individual expands his or her self-identity to incorporate another person. After expanding the self, the individual sees the other person as a part of the self and generates an illusion of self-other identity overlap. [1] Although self-expansion theory was originally proposed to explain general social relationships, Aron et al. (2013) suggest that self-expansion can occur in organizational contexts, such as between colleagues or between an advisor and a protégé.

Applying the theory to leadership studies, Dansereau et al. (2013) propose that follower self-expansion is a fundamental explanation of the influential processes of different leadership theories. Aron and Aron (1996) proposed a two-factor model of attraction to explain the two main determiners of self-expansion: *desirability* and *probability*. The *desirability* of self-expansion refers to the expected benefits of potential expansion of self with a particular other. Previous research suggests leadership is a critical driver of the desirability of self-expansion for followers (Ashforth et al., 2016; Dansereau et al., 2013); leaders can enact follower self-expansion by providing valuable resources (material or informational) for followers' growth and success (Dansereau et al., 2013). In addition, through approachability and consultability, leaders can arouse followers' willingness to engage in self-expansion through fulfilling followers' need for belonging (Ashforth et al., 2016). Moreover, the *probability* of self-expansion refers to the anticipated possibility of developing close relationships after expanding the self. If followers foresee a high likelihood of developing interpersonal rapport with a leader, they will be more likely to initiate self-expansion, especially when the leader possesses desirable resources (cf. Aron et al., 2006).

We anticipate that leader humility can arouse the *desirability* of self-expansion for followers because humble leaders can satisfy followers by "fulfilling their innate needs for competency, autonomy, and relatedness" (Ou et al., 2017, p. 1917), all of which represent essential desires for followers to expand the self to incorporate the leader (Dansereau et al., 2013). Humble leaders are inclined to grant followers psychological license to grow and remove learning barriers (Owens and Hekman, 2012). These actions provide strong psychological resources that help followers continually improve personal competency. Humble leaders also are open-minded and listen to followers, and thereby provide followers with psychological freedom for constant learning and a promotion or growth orientation (Owens and Hekman, 2016) that meets their desire for autonomy. Finally, humble leaders respect the value and contributions of followers, which strengthens followers' willingness to relate to the leader (Ou et al., 2017). Leaders who create these conditions for followers encourage the desirability for followers to build a close relationship with the leader, thus activating self-expansion.

Furthermore, while different leadership approaches could also enhance followers' self-expansion by satisfying their needs (i.e., the desirability effect; see the review by Dansereau et al., 2013), we argue that leader humility is more theoretically compatible with self-expansion due to its unique *probability* effect. A humble leader is more willing to publicly acknowledge personal weakness, and this self-deprecating behavior (self-disclosure) makes the leader appear more "human-like" (Edmondson, 2003; Owens and Hekman, 2012), regardless of position of power. This power-sharing style, which reflects the themes of self-transcendence and expanding followers' roles mentioned above, reminds followers that their values and contributions are recognized and needed by their leader (Owens and Hekman, 2012). Likewise, the theory of implicit egotism (Jones et al., 2004) suggests that individuals

tend to develop an intimate bond with those who remind them of their own identities. As Dansereau et al. (2013) suggest, giving credit to ego-centered individuals makes them feel understood, respected, and valued, so this other-focus of leader humility may also encourage them to expand their identities to incorporate the leader. In short, the strong follower-centered focus and leader-follower role reversal characteristic of leader humility should make followers feel comfortable with easily building a close relationship with their leader, and thus activate followers' self-expansion.

Hypothesis 1: Leader humility is positively related to follower self-expansion.

Van Knippenberg et al. (2004) suggest that followers' self-identity (e.g., self-expansion) and self-efficacy are major self-concepts that transform observed leadership acts into followers' actual behavioral changes (e.g., enhanced performance). The self-expansion theory further suggests that elevated self-efficacy is a beneficial outcome of expanding the self to incorporate others (Aron and Aron, 1996). After expanding the self to incorporate their leader, followers realize that they can more easily obtain material, informational, and social resources from their leader (Dansereau et al., 2013). When followers realize they have access to these critical resources, they become more confident in dealing with assigned complex tasks. A recent empirical study completed by Dys-Steenbergen et al. (2016) also reveals that when self-expansion occurs, individuals think that they are more closely connected to and have a higher relational quality with others. These close social connections offer a variety of resources, including informational and emotional support, which make them anticipate future self-growth. These positive feelings about self-growth elevate individuals' confidence in their ability to complete complex tasks and eventually promote higher self-efficacy.

Research has identified self-efficacy as a critical predictor of individual task performance (Judge and Bono, 2001). A high self-efficacy enhances individuals' belief in their capability to complete assigned tasks and achieve challenging goals, and in turn benefits their productivity and efficiency (Phillips and Gully, 1997). Indeed, a recent meta-analysis conducted by Peterson et al. (2011) concluded that self-efficacy is an important aspect of individual psychological capital that helps employees manage their task demands and motivates them to better engage in their jobs, thus driving elevated performance. Therefore,

Hypothesis 2: Follower self-expansion is positively related to task performance through the mediation effect of self-efficacy.

Combining our previous arguments, because leader humility is considered a critical antecedent of follower self-expansion (Hypothesis 1) and because self-expansion could elevate followers' self-efficacy and thereby improve their task performance (Hypothesis 2), we anticipate that leader humility improves follower performance through a sequential meditation effect. Followers are more likely to see a humble leader as a part of themselves, as previously argued. After internalizing their leaders' attributes, followers become more confident (i.e., have high self-efficacy) in performing their job because of increased perceived and anticipated informational and social resources, and this increased confidence eventually enhances their task performance.

Hypothesis 3: Leader humility is positively related to followers' task performance through a sequential indirect effect via enhanced follower (a) self-expansion and subsequent (b) self-efficacy.

Moderating Effect of Gender and Age Similarity

Self-expansion theory can be used to explain the psychological changes of followers elicited by various leadership approaches and to explore possible boundary conditions of leadership influence. According to Dansereau et al. (2013), the impact of different leadership approaches is contingent on various boundary factors, as these factors influence the association between leadership constructs and follower self-expansion. A common boundary factor for triggering self-expansion is the similarity between leaders and followers. From the social influence perspective, leader-follower similarity should moderate the influence of leadership (Cornelis et al., 2011): the received information will become more valid and believable in the eyes of followers if it is from a similar source (i.e., the demographically similar leader). Moreover, individuals are psychologically attracted by and inclined to maintain positive relationships with similar others (Byrne, 1971). Followers increase their appeal by responding to behaviors of their similar leader, thus magnifying leadership impact.

We expect that demographic similarity between leaders and followers in age and gender will moderate the relationship between leader humility and follower self-expansion. We focus specifically on age and gender as they are "two highly salient and visible demographic characteristics" which convey social meaning in the work context (Pearce and Xu, 2012, p. 377; see also Goldberg, 2005). Indeed, multiple researchers have suggested that gender and age similarity might have the potential to influence the effects of leader humility in organizations (Oc et al., 2015; Owens and Hekman, 2012).

We anticipate that leader-follower demographic similarity in age and gender will strengthen both the *desirability* and *probability* effects of leader humility on follower's self-expansion. Owens and Hekman (2012) have suggested that the age and gender of leaders and

followers will likely influence how followers attribute a leader's displayed humble behaviors and eventually affect how followers react to leader humility. Ferris et al. (1995) also indicate that positive feelings toward a target (e.g., a leader) are critical to judge behavioral intentionality: when people like someone, they are inclined to attribute his or her behaviors to internal (e.g., altruistic or true) rather than external (e.g., self-interested or manipulative) causes. After all, people tend to believe that "good people do good things, and bad people . . . do bad things" (Ferris et al., 1995, p. 224). Therefore, when leaders and followers share demographic similarities (i.e., gender, age), followers' positive feelings toward a leader may lead followers to attribute the leader's humble behavior to dispositional (e.g., honest or sincere) rather than situational (e.g., fake or false) causes. As a result, the leader's humble behaviors are seen as more "*desirable*", allowing self-expansion to occur.

More importantly, demographic similarity in age and gender can also enhance the *probability* effect of leader humility. Aron and Aron (1996) argue that interpersonal similarity plays a vital role in developing and maintaining relationships because it signals the perceived probability of engaging in self-expansion. Demographic similarity is more important for promoting self-expansion than other forms of similarities (e.g., attitudes or personality similarity; Aron et al., 2006) because individuals usually rely on that biological information to make an initial assessment of the feasibility of building close relationships with others (Rusbult and Van Lange, 2003). Among all kinds of interpersonal similarities, demographic similarity "would seem to bear very directly on one's projections for the quality of relational life with the potential partner . . ., (while) the effects of similarity of attitudes or personality would seem less obviously relevant to projected day-to-day interactions" (Aron et al., 2006, p. 389). Accordingly, leader-follower demographic similarity in age and gender eliminates possible communication barriers induced by a generational (Bengtson, 1970) or

gender gap (Pratto et al., 1997), and thus reduces perceived leader-follower distance. This reduced distance may lead followers to believe it is easier to build a close relationship with their humble leader (i.e., improves the perceived probability), and thus activates follower self-expansion. On the contrary, interpersonal dissimilarity in age and gender is a preexisting social hindrance that precludes individuals from building close relationships (Brewer, 1968; Karakayali, 2009; Liviatan et al., 2008). When a follower recognizes a demographic gap, he or she must exert extra effort to shorten the interpersonal distance, which may discourage willingness to self-expand.

Given that demographic similarity in age and gender influences the desirability and probability effects of leader humility, it is thus theoretically compatible with moderating the association between leader humility and follower self-expansion. While the similarity could also make other leadership styles "more desirable," its unique impact on enhancing self-expansion probability may greatly amplify the influence of leader humility. [2] Thus, we propose:

> *Hypotheses 4a and 4b: Demographic similarity in (a) gender and (b) age between leader and follower will moderate the relationship between leader humility and follower self-expansion, such that the positive impact of humility will be strengthened when leader and follower are demographically similar as opposed to dissimilar.*

METHOD

Sample and Procedures

We collected data from 11 companies in mainland China, including six manufacturing companies, two trading companies, and three real estate companies, and we targeted the middle- or first-level managers (leaders) and their immediate subordinates (followers) from these organizations. Respondents from manufacturing companies were from teams in research and development (R&D) (20%) and production (40%). Respondents from the trading and real estate companies were from sales departments (22%) and other supporting functions, such as human resource and finance departments (18%).

We conducted a time-lagged, multisource procedure to reduce the possible common method biases (Podsakoff et al., 2003). We targeted 65 leaders and 308 followers from these companies as our participants. After receiving permission from senior management, we visited these companies to distribute questionnaires. We used identified survey method to give each participant a unique code to make sure we can gather matched data. Each targeted employee was given an introductory letter, a printed questionnaire, and a gift valued at about $2.00 (USD). These participants were asked to report their gender, age, and assessments about leader humility and follower self-expansion. Approximately six weeks later, we sent a second questionnaire to the targeted leaders and followers. The followers were asked to complete a survey measuring self-efficacy, and the leaders were asked to report their own gender and age and their followers' task performance. Participants, including leaders and followers, who did not complete the survey were treated as missing data and was deleted. Our final sample is composed of 256 leader-follower dyads, including 57 leaders (88% response rate) and 256 followers (83% response rate). We conducted an analysis of variance to further

examine for nonresponse bias. Results indicated that no significant mean differences existed between respondents and non-respondents in Time 2 over gender, age, and leader humility.

The average follower was 32 years old and had a mean work experience of 5.8 years, and about 45% of the participating followers were female. The average leader was 41 years old and had a mean work experience of 10.67 years, and 49% of the participating leaders were female. On average, each participating follower had been supervised by his or her leader for about 4.07 years. We conducted an analysis of variance to determine whether respondents from various types of work units (e.g., R&D, production, sales, and other departments) were different among the main variables (e.g., leader humility). The results showed no significant differences between these respondents in terms of team types ($p > .05$).

Measures

Leader humility. Leader humility was measured by using Owens et al. (2013)'s leader humility scale. The Cronbach's alpha of this scale in our study was .92. Items were rated on a 7-point scale ranging from 1 (*totally disagree*) to 7 (*totally agree*). Sample items include statements such as "My leader acknowledges when others have more knowledge or skills than himself or herself," "My leader shows appreciation for the unique contributions of others," and "My leader is open to the advice of others."

In our theoretical model, we test leader humility at the individual level for multiple reasons. First, because theoretically we are measuring individual psychological changes (self-expansion and self-efficacy) and behavior (task performance), we expect to test only the within-group effect of leader humility (cf. Preacher et al., 2010). Second, because self-expansion is triggered by specific leader-follower dyad interactions (Aron et al., 1991;

Gardner et al., 2002), it may not be appropriate to assume humility as only a group-level construct in our model. For the same reasons, recent studies have treated leadership as an individual-level variable to match the analysis with the theory (Liao and Chuang, 2007; Peus et al., 2012; Piccolo and Colquitt, 2006; Vecchio et al., 2010; Wang and Cheng, 2010; Wang and Howell, 2010).

Follower self-expansion. We used Aron, Aron, and Smollan's (1992) Inclusion of Other in Self scale (see Appendix A) to measure the extent to which followers expanded themselves to include their leader in the self. Each respondent was asked to circle the picture that best described the overlap between himself or herself and his or her leader. Aron et al. (1992) have reported a test-retest reliability of .85 for this measurement. This scale also has been used in previous studies (e.g., Gino and Galinsky, 2012) to measure self-expansion in close relationships. Although using a single-item scale may elicit concerns about reliability (Wanous and Hudy, 2001), various recent studies suggest that the use of these measurements do not seriously impede their predictive validity, compared to other multi-item scales (Bergkvist, 2015; Böckenholt and Lehmann, 2015; Kamakura, 2014). Thus, in accordance with previous self-expansion research (e.g., Aron et al., 1991; Gino and Galinsky, 2012), we believe that this scale validly measures follower self-expansion.

Self-efficacy. We used Chen, Gully, and Eden's (2001) 8-item scale to assess follower self-efficacy. The Cronbach's alpha of this scale in our study was .91. Items were rated on a 7-point scale ranging from 1 (*totally disagree*) to 7 (*totally agree*). Sample items include statements such as "I will be able to achieve most of the goals that I have set for myself" and "When facing difficult tasks, I am certain that I will accomplish them".

Task performance. We used Welbourne, Johnson, and Erez's (1998) 4-item Role-Based Performance scale to measure follower task performance. Leaders were asked to evaluate their followers' performance. The Cronbach's alpha of this scale in our study was .85. Items were rated on a 7-point scale ranging from 1 (*very bad*) to 7 (*very good*). Sample items include "follower's quantity of work output" and "follower's quality of work output."

Demographic similarity. We dummy coded the gender similarity of our participants. The code of 1 meant that a leader and follower were in the same gender category (e.g., both are females), and the code of 0 meant that they were in different categories.

Age similarity was operationalized by the negative absolute value of the age differences between a leader and a follower (Mollenhorst et al., 2008). For instance, if the age difference was only 1 year, the similarity score was coded as −1 (i.e., the leader and follower are quite similar in age). If the age difference was 15 years, the similarity score was −15 (i.e., the leader and follower are quite different in age).

Control variable. Past research has argued that authentic leadership and leader humility share some similarities in that they both cultivate follower development and identification with the leader (Gardner et al., 2005). Thus, to investigate the vital role of leader humility in triggering follower self-expansion, we controlled authentic leadership in our model. Authentic leadership was measured with Walumbwa et al. (2008)'s 16-item scale. The participants (followers) were asked to evaluate their leaders by responding to questions such as "My leader demonstrates beliefs that are consistent with actions" on a basis of 7-point scale, ranging from 1 (*totally disagree*) to 7 (*totally agree*). The Cronbach's alpha of this scale in our study was .90. In addition, because we were interested in how gender and age

similarity affect follower self-expansion, we controlled the gender and age of both sides (i.e., leader and follower) to reduce the confounded effects (e.g., Avery et al., 2007; Levin et al., 2006). Gender was measured with dummy variables, with 1 as code for male and 0 as code for female.

Analyses

Following the recommendations of Taylor, MacKinnon, and Tein (2008), we used structural equation modeling with AMOS 22.0 to examine the impact of leader humility on follower self-expansion (Hypothesis 1); the relationship between follower self-expansion, self-efficacy, and task performance (Hypothesis 2); and the sequential indirect effect of leader humility on follower performance (Hypothesis 3). To test the sequential indirect effect, we performed bootstrapping analyses, following the suggestion of Preacher and Hayes (2004). Based on Little, Bovaird, and Widaman's (2006) recommendation, we used an orthogonal-centered product term to test our proposed moderated effects (Hypotheses 4a and 4b) in AMOS.

RESULTS

The means, standard deviations, and correlations for all variables are shown in Table I. Leader humility was significantly related to follower self-expansion ($r = .14$, $p < .05$), self-efficacy ($r = .15$, $p < .05$), and task performance ($r = .18$, $p < .01$). Follower self-expansion was significantly related to self-efficacy ($r = .28$, $p < .001$) and task performance ($r = .29$, $p < .001$). In addition, self-efficacy was significantly related to task performance ($r = .17$, $p < .01$).

Measurement Model

We first conducted a confirmatory factor analysis using AMOS 22.0 to verify convergent and discriminant validity of the constructs in our model. The measurement model was composed of four latent factors (leader humility, authentic leadership, self-efficacy, and task performance) with 37 indicators (9 items for leader humility, 16 items for authentic leadership, 8 items for self-efficacy, and 4 items for task performance). The confirmatory factor models showed that the four-factor model yielded a better fit to the data ($\chi^2 = 1324.81$, $df = 623$, CFI = .92, TLI = .91, RMSEA = .06) than the three-factor model where leader humility and authentic leadership were combined ($\chi^2 = 1658.93$, $df = 626$, CFI = 90, TLI = .89, RMSEA = .07, $\Delta\chi^2 = 333.82$) and the three-factor model where self-efficacy and task performance were combined ($\chi^2 = 1827.92$, $df = 626$, CFI = 87, TLI = .86, RMSEA = .09, $\Delta\chi^2 = 503.11$). The four-factor model also showed a better fit than the two-factor model (i.e., leader humility + authentic leadership & self-efficacy + task performance; $\chi^2 = 2286.34$, $df = 628$, CFI = .82, TLI = .80, RMSEA = .12, $\Delta\chi^2 = 627.41$) and the one-factor model ($\chi^2 = 3814.94$, $df = 629$, CFI = .55, TLI = .50, RMSEA = .22, $\Delta\chi^2 = 1528.60$). These results confirmed the discriminant validity of the four targeted constructs in our model.

Structural Model

As per the recommendation of Kunze et al. (2016), we adopted a step-wise approach for comparing different models to test the sequential indirect model with moderators (see Table II). We first conducted a three-path mediation model (Hypothesized Model A) in which all the variables were included and the moderating effects were set to zero. The purpose of testing this model was to examine the proposed direct and indirect effects (Hypotheses 1–3). To test the sequential indirect effect of leader humility → self-expansion → self-efficacy → task performance (Hypothesis 3), all possible direct and indirect effects in this model were

controlled, as recommended by Hayes (2013) and Kunze et al. (2016)—though we did not theoretically propose them. The result showed that this hypothesized model had good model fit to the data (χ^2 = 890.21, df = 425, CFI = .91, TLI = .89, RMSEA = .07, AIC = 842).

Next, we freed the moderation effects in our model (hypothesized Model B) to see whether adding the interactive terms was adequate. Results showed that the hypothesized Model B fit better with the data (χ^2 = 856.40, df = 423, CFI = .91, TLI = .90, RMSEA = .06, AIC = 819) than Model A ($\Delta\chi^2$ = 33.81, p < .001), suggesting that it is methodologically appropriate to assume the moderating effects in our model. This result also confirmed our proposed theoretical model.

To explore additional possible relationships in our model, we conducted a series of alternative model tests (Kunze et al., 2016). First, we tested a "direct effects only" model (Alternative Model 1) in which all indirect effects were restricted to zero to ensure that the indirect effects were the key in our framework. This alternative model had a significantly worse model fit ($\Delta\chi^2$ = 43.74, Δdf = 3, p < .001, AIC = 848), indicating that considering indirect paths was appropriate.

Second, we wanted to know whether we could justify our proposed sequential indirect effect. We tested a "self-efficacy as mediator only" model (Alternative Model 2), in which the path coefficient of leader humility to task performance through self-expansion was set as zero (i.e., no indirect effect through self-expansion), and it showed a significantly worse model fit than our Hypothesized Model B ($\Delta\chi^2$ = 40.48, Δdf = 3, p < .001, AIC = 846). Similarly, we tested a "self-expansion as mediator only" model (Alternative Model 3), in which the path coefficient of leader humility to task performance through self-efficacy was

set as zero, and, again, this alternative model was significantly worse than Model B ($\Delta\chi^2 =$ 31.57, $\Delta df = 3$, $p < .001$, AIC = 840). These results supported our proposed sequential effect in the model.

Finally, we tested a "reversed mediation" model (Alternative Model 4), in which the order of the two mediators was reversed. This alternative model had a worse model fit ($\Delta\chi^2 =$ 8.7, $\Delta df = 0$, $p < .001$, AIC = 824) than Model B, supporting the proposed order between self-expansion and self-efficacy. We also tested a "reversed causality" model (Alternative Model 5; we reversed the order of leader humility and self-expansion), and this alternative model had a significantly worse fit to the data ($\Delta\chi^2 = 34.14$, $\Delta df = 0$, $p < .001$, AIC = 835). In short, the results of these model comparisons suggested our proposed theoretical model (Hypothesized Model B) had the best fit to the data. Hypothesized Model B was our final model for hypotheses testing.

We then examined our hypotheses based on Hypothesized Model B (see Figure 2). Results showed that leader humility was positively related to follower self-expansion ($\beta = .15$, $p < .05$), supporting Hypothesis 1. Moreover, self-expansion was positively associated with self-efficacy ($\beta = .27$, $p < .001$), and self-efficacy was positively correlated with task performance ($\beta = .14$, $p < .05$), both of which provided preliminary support to our hypotheses about indirect effects (Hypotheses 2 and 3). The interaction between leader humility and gender similarity was positively related to follower self-expansion ($\beta = .29$, $p < .001$), and the interaction between leader humility and age similarity was positively related to follower self-expansion ($\beta = .14$, $p < .05$), supporting Hypotheses 4a and 4b.

To test the indirect effects, we adopted the bootstrapping procedure (n = 3,000 repetitions) recommended by Preacher and Hayes (2004). The results showed that the indirect effect of self-expansion on follower performance through self-efficacy was significant (indirect effect = .03, 95% confidence interval = [.01, .06]), supporting Hypothesis 2. The test for the sequential indirect effect also confirmed our expectation (indirect effect = .01, 95% confidence interval = [.001, .02]), supporting Hypothesis 3.

To further test our hypothesized moderation effect, we plotted the interactive effects and performed simple slope tests. As shown in Figure 3, leader humility was significantly related to follower self-expansion when leaders and followers were the same gender (β = .57, t = 6.15, p < .001), whereas such an association became insignificant when there was a gender difference (β = −.18, t = −1.42, ns.). In addition, as shown in Figure 4, leader humility had a positive impact when leaders and followers were similar in age (+1 SD; β = .40, t = 3.35, p < .001), whereas such a relationship was not significant in the case of low age similarity (−1 SD; β = −.02, t = −.12, ns). Accordingly, Hypotheses 4a and 4b were supported.

Robustness Tests

Due to the nature of leader-follower dyadic interactions in this study, we performed analyses based on the single-level assumption. However, because our data was collected nested in groups, our analyses could possibly violate the multilevel nature of the data. We thus conducted multilevel modeling as a robustness check to examine our proposed hypotheses. First, we used hierarchical linear modeling (HLM) to test Hypothesis 1. Results showed that after controlling for authentic leadership, leader age, leader gender, follower age, and follower gender, leader humility was significantly related to self-expansion (γ = .48, SE = .13,

p < .05), supporting Hypothesis 1. Then we used HLM to test the moderating effect (Hypothesis 4). Results showed that the interaction between leader humility and gender similarity ($\gamma = .32$, *SE* = .08, *p* < .001) and the interaction between leader humility and age similarity ($\gamma = .19$, *SE* = .08, *p* < .05) were both significantly related to follower self-expansion, supporting Hypotheses 4a and 4b.

Finally, we tested all the indirect effects using multilevel modeling (*n* = 10,000 repetitions) in Mplus (MacKinnon, 2008; Raudenbush and Bryk, 2002; Zhang et al., 2009). Results showed that the indirect effect of self-expansion on performance via self-efficacy was .02 (95% confidence interval = [.001, .06]), supporting Hypothesis 2. The sequential indirect effect was .01 (95% confidence interval = [.001, .06]), supporting Hypothesis 3. Thus, our proposed hypotheses were all supported in multilevel modeling.

DISCUSSION

The present study investigates humble leadership effectiveness through the self-expansion perspective. We theoretically argue and empirically examine that leader humility encourages self-expansion in followers, strengthens followers' confidence in performing assigned tasks (i.e., self-efficacy), and demonstrates a positive effect on followers' work performance. Furthermore, when a leader and follower are the same gender or are of similar age, the leader's expressed humility more effectively improves followers' willingness to internalize their leaders' attributes. On the other hand, when they are different genders or have a significant difference in age, the positive effect of leader humility on follower self-expansion becomes neutralized.

Research Contributions and Theoretical Implications

Our research contributes to the literature in multiple ways. By introducing the self-expansion perspective, this research offers a fundamental theoretical justification for the effectiveness of humble leadership. Although researchers have found that leader humility can benefit followers, teams, and organizations (e.g., Ou et al., 2014b; Ou et al., 2018; Owens and Hekman, 2016; Owens et al., 2013), most of the current studies place the focus on the behavioral influence of humble leaders. However, if expressing humility is viewed as a "follower-centered" style (Owens and Hekman, 2012), one cannot claim leader humility as "leadership" if the social construction process of followers' identity changes is not well-explored (Dansereau et al., 2013; cf. DeRue and Ashford, 2010). No study, as far as we know, has theoretically or empirically examined the impact of leader humility at the follower's identity level. This is significant because identity is at the heart of one's psychology—the fulcrum upon which perspectives, desires, attitudes, and ultimately behaviors hinge. It is the "totality of one's self-construal" (Weinreich, 1986). Moreover, Alvesson and Willmott (2002) proposed that "leadership is effective when it coalesces and regulates identity" (p. 636). Thus, while past studies have shown a link between leader humility and follower attitudes, such as job satisfaction, and motivation, such as job engagement (Owens et al., 2013), this paper theorizes and tests a more foundational impact of leader humility on followers, upon which subsequent theory and research about more proximal effects, such as follower attitudes, cognitions, and behaviors, may be based. From our point of view, the present study complements the theoretical development of leader humility and helps to formulate it as a "leadership" construct (Dansereau et al., 2013).

Our research also provides new insights regarding whether initiating a common vision is necessary for leadership. Traditional views about leadership as a social influence process emphasize that leadership is about making sure that followers have a shared vision (Bass and Avolio, 1994; Bass and Bass, 2009). From a self-expansion perspective, leaders who promote a shared vision can help reduce perceived uncertainty and ambiguity in changes for followers, which triggers their self-expansion. However, DeRue (2011) reexamined leadership from an interactive and contextual perspective, arguing that the assumption that leadership requires a shared vision may not always hold true because, from the identity construction perspective, there is no need for employees to realize a shared vision. Our research supports DeRue's (2011) argument by proving that even without cultivating a shared vision or a collective goal, leader humility can still be effective through co-constructing followers' self-identities by emphasizing follower development, initiating leader-follower role reversal, and satisfying followers' needs for competency, autonomy, and relatedness (Ou et al., 2017).

Further, our research contributes to the literature by exploring when leader humility is more influential in triggering self-expansion. Although the positive impacts of leader humility have been well-documented in previous literature (e.g., Nielsen et al., 2010; Ou et al., 2014b; Owens and Hekman, 2012), little research attention has been placed on the conditions under which the effect of leader humility is strengthened or weakened (Owens and Hekman, 2012; Owens et al., 2015). This is critical because the effectiveness of leadership varies with different conditions or different leader-follower dyads (Kerr et al., 1974; Kriger and Seng, 2005), and comprehensive understanding of leadership effectiveness requires us to know under which conditions leadership will have the most or least influential effect. Our analysis shows that when a leader and follower are similar in gender and age, the positive relationship between leader humility and follower self-expansion is strengthened. This result

is consistent with previous conclusions that demographically similar followers can gain more benefits from their leader through direct and indirect ways. For example, Westphal and Zajac (1995) found that a CEO will be more likely to select demographically similar directors to the board. Vecchio and Brazil (2007) indicated that same-sex leader-subordinate pairs have more positive working relationships. Our study thus contributes to the leader humility literature by identifying the boundary conditions of leader humility's influence and further supports the theoretical and practical importance of leader-follower characteristics in understanding how leadership influences followers (Kellerman, 2008).

Finally, our research contributes to understanding the relationship between leadership and self-expansion, answering the call of Dansereau et al. (2013) to highlight self-expansion as a fundamental mechanism explaining why leadership is or is not influential. Although self-expansion theory has been considered as a valuable instrument for understanding the inherent social-psychological nature of the relationship between leaders and followers in the leadership process (Dansereau et al., 2013), few studies have provided empirical support for the self-expansion perspective of leadership. By exploring the relationship between leader humility and follower self-expansion, this research is the first to empirically respond to Dansereau et al. (2013) and contributes to both leadership literature and self-expansion theory by integrating leadership with the self-expansion perspective.

Practical Implications

Our results confirm that leader humility has an effect on follower task performance and suggest that emphasizing leader humility could improve follower performance. Moreover, our research shows that leader humility triggers self-expansion of followers to internalize their leaders' perspectives, resources and identities. This finding reveals what leader humility

will change in followers and what this change means to organizations. Knowing that leader humility has a positive effect on followers should motivate leaders to show humility to followers because their humble behavior will benefit both their organization and followers. Furthermore, our results show that when a leader and follower are similar in age or gender, leader humility is more likely to promote follower growth, because followers who are demographically similar to their leaders are more likely to internalize their leaders' attributes.

To our surprise, our analysis results also suggest that leader humility's impact is mitigated when leaders and followers are demographically different; this finding offers several practical implications. First, although expressing humility could be an effective leadership style, we caution leaders that showing humility may not bring the expected benefit in followers, particularly when followers are demographically dissimilar from leaders. This finding echoes Pfeffer's (2015) view about demonstrating humility or modesty as a leadership approach: expressing humility might be useful, but in some circumstances leaders should be assertive, directive, and even narcissistic to effectively manage followers. Our research suggests one particular situation in which leader humility might not receive the anticipated benefits. Second, this finding suggests that followers who do not share demographic characteristics with their leaders may be less likely to reap the self-expanding benefits resulting from interactions with a humble leader. Accordingly, we recommend organizations be vigilant about these effects and proactively develop, encourage, and even formally implement ways of fostering frequent and satisfying leader-follower interactions for followers who may be demographically different from their leaders.

Limitations and Future Research

Several research limitations of this study should be noted. First, we conducted this study in China, so it is not clear how much of the results can be generalized to a Western context. Cultural factors, such as power distance, collectivism (Hofstede, 1984), and traditionalism (Spreitzer et al., 2005) may influence followers' receptiveness to leader humility and motivation to internalize leaders' attributes. For example, people in cultures with lower power distance may find it easier to include a humble leader as part of the self because they treat leaders as an equal other (Daniels et al., 2014; Sue-Chan and Ong, 2002) and form a close interpersonal relationship with them. Thus, we recommend future research to explore whether cultural differences influence the proposed model in this research.

Using a single-item measure of self-expansion may be another limitation in our research. Although previous studies have demonstrated the high validity of this scale (Aron et al., 1992; Gino and Galinsky, 2012) and scholars have examined the equal predictive validity between multiple-item and single-item measures (Bergkvist and Rossiter, 2007), a single-item measure is still a concern due to the lack of reliability testing. Moreover, a single-item measurement may also be too broad for researchers to examine the specific aspects of leaders that followers include in their self-expansion. Thus, we call for future research to improve this measurement or develop other detailed scales to better capture the occurrence of self-expansion.

Future researchers could also explore other boundary conditions of the impacts of leader humility. Harrison et al. (1998) point out that the deep-level congruence between leader and follower, such as proactive personality (Zhang et al., 2012) and goal importance (Colbert et al., 2008), can also affect the relationship between leaders and followers.

Although in our research we found that demographic similarity increases the probability of followers expanding their self when they have a humble leader, we did not exclude the possibility that other kinds of similarity may demonstrate different effects. Since desirability is the other identified predictor of self-expansion (Aron and Aron, 1996), followers may not include the humble leader in the self if the similarity reduces followers' desire to expand. For example, task-orientated similarity, which encompasses skill-based or performance-driven similarities (Jackson et al., 1995), might not benefit leader humility because it represents a similarity in the knowledge and resources held by a leader and a follower, meaning the follower cannot gain a lot of benefit through including the leader in the self. Thus, future research could explore how these deep-level similarities influence self-expansion. Besides, Aron et al. (1991) have suggested that if a target (e.g., leader) has few resources or little experience, individuals (e.g., followers) would have nothing to expand, indicating that leader competence or ability might be another moderating role in influencing followers' self-expansion. As leader competence can be partly reflected by leader gender and age (e.g., an older male leader may be seen as more capable; see Berger et al., 1977; Biernat and Fuegen, 2001; see also Owens and Hekman, 2012), it would be interesting for future research to explore the effectiveness of leader humility under other circumstances, such as a female leader with a male subordinate or a younger leader with an older subordinate.

Finally, although self-expansion theory can explain the relationship between leader humility and follower task performance, it is also worth exploring whether this theory is suitable for explaining other follower outcomes, such as follower commitment, follower creativity, or organizational citizen behaviors. Lord and Maher (1991) differentiated two leadership outcomes: leadership perception (e.g., commitment to or satisfaction with a leader) and leader effectiveness (e.g., follower or group performance). Although our research

explored follower performance as an indicator of leadership effectiveness, it is worthwhile for future research to examine the effect of leader humility on follower commitment.

CONCLUSION

Exercising humility can be utilized as an effective leadership style in organizations. It is critical to understand why and when leader humility positively affects followers, both for theoretical development and practical implications. Our theoretical model and empirical results increase our knowledge of how and when humble leaders encourage followers' self-identity change and whether this change is correlated with their work performance. We hope our work improves the current understanding of leader humility and inspires future research.

NOTES

[1] Previous researchers interchangeably use "self-expansion" (e.g., Aron and Aron, 1986), "self-other overlap" (e.g., Batson et al., 1997), and "inclusion of other in the self" (Aron et al., 1992) to describe this psychological state. Aron and Aron (1996) suggest that compared to using "including the other in the self," using "self-expansion" could be more straightforward and reduce the awkwardness in English (Ashforth et al., 2016). Thus, we prefer the term self-expansion in our paper.

[2] We sincerely appreciate this suggestion from one anonymous reviewer.

REFERENCES

Altman, I. and Taylor, D. A. (1973). *Social Penetration: The Development of Interpersonal Relationships*. New York: Holt, Rinehart & Winston.

Alvesson, M. and Willmott, H. (2002). 'Identity regulation as organizational control: Producing the appropriate individual'. *Journal of Management Studies*, **39**, 619–44.

Aron, A. and Aron, E. N. (1986). *Love and the Expansion of Self: Understanding Attraction and Satisfaction*. New York: Hemisphere Publishing Corp/Harper and Row Publishers.

Aron, A. and Aron, E. N. (1996). 'Self and self-expansion in relationships'. In Fletcher, G. J. and Fitness, J. (Eds), *Knowledge Structures in Close Relationships: A Social Psychological Approach*. London: Psychology Press, 325–44.

Aron, A., Aron, E. N. and Norman, C. (2001). 'Self-expansion model of motivation and cognition in close relationships and beyond'. In Fletcher, G. and Clark, M. S. (Eds), *Blackwell Handbook of Social Psychology: Interpersonal Processes*. New York: John Wiley and Sons, 478–501.

Aron, A., Aron, E. N. and Smollan, D. (1992). 'Inclusion of other in the self scale and the structure of interpersonal closeness'. *Journal of Personality and Social Psychology*, **63**, 596–612.

Aron, A., Aron, E. N., Tudor, M. and Nelson, G. (1991). 'Close relationships as including other in the self'. *Journal of Personality and Social Psychology*, **60**, 241–53.

Aron, A., Lewandowski Jr, G. W., Mashek, D. and Aron, E. N. (2013). 'The self-expansion model of motivation and cognition in close relationships'. In Simpson, J. A. and Campbell, L. (Eds), *The Oxford Handbook of Close Relationships*. Oxford: Oxford University Press, 90–115.

Aron, A., Steele, J. L., Kashdan, T. B. and Perez, M. (2006). 'When similars do not attract: Tests of a prediction from the self-expansion model'. *Personal Relationships*, **13**, 387–96.

Ashforth, B. E., Schinoff, B. S. and Rogers, K. M. (2016). '"I identify with her," "I identify with him": Unpacking the dynamics of personal identification in organizations'. *Academy of Management Review*, **41**, 28–60.

Avery, D. R., McKay, P. F. and Wilson, D. C. (2007). 'Engaging the aging workforce: the relationship between perceived age similarity, satisfaction with coworkers, and employee engagement'. *Journal of Applied Psychology*, **92**, 1542–56.

Avolio, B. J. (2007). 'Promoting more integrative strategies for leadership theory-building'. *American Psychologist*, **62**, 25–33.

Avolio, B. J. and Gardner, W. L. (2005). 'Authentic leadership development: Getting to the root of positive forms of leadership'. *The Leadership Quarterly*, **16**, 315–38.

Bass, B. M. and Avolio, B. J. (1994). 'Transformational leadership and organizational culture'. *The International Journal of Public Administration*, **17**, 541–54.

Bass, B. M. and Bass, R. (2009). *The Bass Handbook of Leadership: Theory, Research, and Managerial Applications*. New York: Simon and Schuster.

Batson, C. D., Sager, K., Garst, E., Kang, M., Rubchinsky, K. and Dawson, K. (1997). 'Is empathy-induced helping due to self–other merging?'. *Journal of Personality and Social Psychology*, **73**, 495–509.

Bengtson, V. L. (1970). 'The generation gap: A review and typology of social-psychological perspectives'. *Youth and Society*, **2**, 7–32.

Berger, J., Fisek, M. H., Norman, R. Z. and Zelditch, M. Jr.. (1977). *Status Characteristics and Social Interaction: An Expectation States Approach*. New York: Elsevier.

Bergkvist, L. (2015). 'Appropriate use of single-item measures is here to stay'. *Marketing Letters*, **26**, 1–11.

Bergkvist, L. and Rossiter, J. R. (2007). 'The predictive validity of multiple-item versus single-item measures of the same constructs'. *Journal of Marketing Research*, **44**, 175–84.

Biernat, M. and Fuegen, K. (2001). 'Shifting standards and the evaluation of competence: Complexity in gender-based judgment and decision making'. *Journal of Social Issues*, **57**, 707–24.

Böckenholt, U. and Lehmann, D. R. (2015). 'On the limits of research rigidity: the number of items in a scale'. *Marketing Letters*, **26**, 1–4.

Brewer, M. B. (1968). 'Determinants of social distance among East African tribal groups'. *Journal of Personality and Social Psychology*, **10**, 279–89.

Brown, M. E. and Treviño, L. K. (2006). 'Ethical leadership: A review and future directions'. *The Leadership Quarterly*, **17**, 595–616.

Buss, D. M. and Craik, K. H. (1983). 'The act frequency approach to personality'. *Psychological Review*, **90**, 105–26.

Byrne, D. E. (1971). *The Attraction Paradigm*. San Diego, CA: Academic Press.

Chen, G., Gully, S. M. and Eden, D. (2001). 'Validation of a new general self-efficacy scale'. *Organizational Research Methods*, **4**, 62–83.

Chiu, C. C., Owens, B. P. and Tesluk, P. E. (2016). 'Initiating and utilizing shared leadership in teams: The role of leader humility, team proactive personality, and team performance capability'. *Journal of Applied Psychology*, **101**, 1705–20.

Colbert, A. E., Kristof-Brown, A. L., Bradley, B. H. and Barrick, M. R. (2008). 'CEO transformational leadership: The role of goal importance congruence in top management teams'. *Academy of Management Journal*, **51**, 81–96.

Cornelis, I., Van Hiel, A. and De Cremer, D. (2011). 'Birds of a feather: Leader-follower similarity and procedural fairness effects on cooperation'. *European Journal of Work and Organizational Psychology*, **20**, 388–415.

Crossan, M. M., Byrne, A., Seijts, G. H., Reno, M., Monzani, L. and Gandz, J. (2017). 'Toward a framework of leader character in organizations'. *Journal of Management Studies*, **54**, 986–1018.

Daniels, M. A., Greguras, G. J., Bashshur, M. R. and Oc, B. (2014). 'Do humble leaders affect all followers similarly? The role of power distance'. In *Proceedings of the 74th Annual Meeting of the Academy of Management*, Philadelphia, 1–5 August.

Dansereau, F., Seitz, S. R., Chiu, C. Y., Shaughnessy, B. and Yammarino, F. J. (2013). 'What makes leadership, leadership? Using self-expansion theory to integrate traditional and contemporary approaches'. *The Leadership Quarterly*, **24**, 798–821.

DeRue, D. S. (2011). 'Adaptive leadership theory: Leading and following as a complex adaptive process'. *Research in Organizational Behavior*, **31**, 125–50.

DeRue, D. S. and Ashford, S. J. (2010). 'Who will lead and who will follow? A social process of leadership identity construction in organizations'. *Academy of Management Review*, **35**, 627–47.

Dinh, J. E., Lord, R. G., Gardner, W. L., Meuser, J. D., Liden, R. C. and Hu, J. (2014). 'Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives'. *The Leadership Quarterly*, **25**, 36–62.

Dys-Steenbergen, O., Wright, S. C. and Aron, A. (2016). 'Self-expansion motivation improves cross-group interactions and enhances self-growth'. *Group Processes & Intergroup Relations*, **19**, 60–71.

Edmondson, A. C. (2003). 'Speaking up in the operating room: How team leaders promote learning in interdisciplinary action teams'. *Journal of Management Studies*, **40**, 1419–52.

Ehrhart, M. G. and Klein, K. J. (2001). 'Predicting followers' preferences for charismatic leadership: The influence of follower values and personality'. *The Leadership Quarterly*, **12**, 153–79.

Exline, J. J., Campbell, W. K., Baumeister, R. F., Joiner, T., Krueger, J. and Kachorek, L. V. (2004). 'Humility and modesty'. In Peterson, C. and Seligman, M. E. (Eds), *Character Strengths and Virtues: A Handbook and Classification*. Oxford: Oxford University Press, 461–75.

Ferris, G. R., Bhawuk, D. P. S., Fedor, D. F. and Judge, T. A. (1995). 'Organizational politics and citizenship: Attributions of intentionality and construct definition'. In Martinko, M.J. (Ed.), A*dvances in Attribution Theory: An Organizational Perspective*. Boca Raton, FL: St. Lucie Press, 231–52.

Fleeson, W. (2001). 'Toward a structure-and process-integrated view of personality: Traits as density distributions of states'. *Journal of Personality and Social Psychology*, **80**, 1011–27.

Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R. and Walumbwa, F. (2005). '"Can you see the real me?" A self-based model of authentic leader and follower development'. *The Leadership Quarterly*, **16**, 343–72.

Gardner, W. L., Gabriel, S. and Hochschild, L. (2002). 'When you and I are "we", you are not threatening: the role of self-expansion in social comparison'. *Journal of Personality and Social Psychology*, **82**, 239–51.

Gino, F. and Galinsky, A. D. (2012). 'Vicarious dishonesty: When psychological closeness creates distance from one's moral compass'. *Organizational Behavior and Human Decision Processes*, **119**, 15–26.

Goldberg, C. B. (2005). 'Relational demography and similarity-attraction in interview assessments and subsequent offer decisions are we missing something'? *Group and Organization Management*, **30**, 597–624.

Grant, A. M., Gino, F. and Hofmann, D. A. (2011). 'Reversing the extraverted leadership advantage: The role of employee proactivity'. *Academy of Management Journal*, **54**, 528–50.

Hannah, S. T., Woolfolk, R. L. and Lord, R. G. (2009). 'Leader self-structure: a framework for positive leadership'. *Journal of Organizational Behavior*, **30**, 269–90.

Harrison, D. A., Price, K. H. and Bell, M. P. (1998). 'Beyond relational demography: Time and the effects of surface-and deep-level diversity on work group cohesion'. *Academy of Management Journal*, **41**, 96–107.

Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York: Guilford Press.

Hofstede, G. (1984). *Culture's Consequences: International Differences in Work-Related Values*. London: Sage.

Jackson, S. E., May, K. E. and Whitney, K. (1995). 'Understanding the dynamics of diversity in decision-making teams'. In Guzzo, R. A. and Salas, E. (Eds), *Team Effectiveness and Decision Making in Organizations*. San Francisco, CA: Jossey-Bass.

Jones, J. T., Pelham, B. W., Carvallo, M. and Mirenberg, M. C. (2004). 'How do I love thee? Let me count the Js: Implicit egotism and interpersonal attraction'. *Journal of Personality and Social Psychology*, **87**, 665–83.

Judge, T. A. and Bono, J. E. (2001). 'Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis'. *Journal of Applied Psychology*, **86**, 80–92.

Kamakura, W. A. (2014). 'Measure twice and cut once: the carpenter's rule still applies'. *Marketing Letters*, **26**, 1–7.

Karakayali, N. (2009). 'Social distance and affective orientations'. *Sociological Forum*, **24**, 538–62.

Kellerman, B. (2008). *Followership: How Followers Are Creating Change and Changing Leaders.* Boston, MA: Harvard Business School Press.

Kerr, S., Schriesheim, C. A., Murphy, C. J. and Stogdill, R. M. (1974). 'Toward a contingency theory of leadership based upon the consideration and initiating structure literature'. *Organizational Behavior and Human Performance*, **12**, 62–82.

Kriger, M. and Seng, Y. (2005). 'Leadership with inner meaning: A contingency theory of leadership based on the worldviews of five religions'. *The Leadership Quarterly*, **16**, 771–806.

Kunze, F., De Jong, S. B. and Bruch, H. (2016). 'Consequences of collective-focused leadership and differentiated individual-focused leadership development and testing of an organizational-level model'. *Journal of Management*, **42**, 886–914.

Levin, D. Z., Whitener, E. M. and Cross, R. (2006). 'Perceived trustworthiness of knowledge sources: The moderating impact of relationship length'. *Journal of Applied Psychology*, **91**, 1163–71.

Liao, H. and Chuang, A. (2007). 'Transforming service employees and climate: a multilevel, multisource examination of transformational leadership in building long-term service relationships'. *Journal of Applied Psychology*, **92**, 1006–19.

Little, T. D., Bovaird, J. A. and Widaman, K. F. (2006). 'On the merits of orthogonalizing powered and product terms: Implications for modeling interactions among latent variables'. *Structural Equation Modeling*, **13**, 497–519.

Liviatan, I., Trope, Y. and Liberman, N. (2008). 'Interpersonal similarity as a social distance dimension: Implications for perception of others' actions'. *Journal of Experimental Social Psychology*, **44**, 1256–69.

Lord, R. G. and Maher, K. J. (1991). *Leadership and Information Processing: Linking Perceptions and Performance*. Boston: Unwin Hyman.

MacKinnon, D. P. (2008). *Introduction to Statistical Mediation Analysis*. New York: Routledge.

Meindl, J. R. (1995). 'The romance of leadership as a follower-centric theory: A social constructionist approach'. *The Leadership Quarterly*, **6**, 329–41.

Mollenhorst, G., Völker, B. and Flap, H. (2008). 'Social contexts and core discussion networks: Using a choice approach to study similarity in intimate relationships'. *Social Forces*, **86**, 937–65.

Morris, J. A., Brotheridge, C. M. and Urbanski, J. C. (2005). 'Bringing humility to leadership: Antecedents and consequences of leader humility'. *Human Relations*, **58**, 1323–50.

Nelson, D. and Cooper, C. L. (2007). *Positive Organizational Behavior*. London: Sage.

Nielsen, R. and Marrone, J. A. (in press). 'Humility: our current understanding of the construct and its role in organizations'. *International Journal of Management Reviews*. in press.

Nielsen, R., Marrone, J. A. and Slay, H. S. (2010). 'A new look at humility: Exploring the humility concept and its role in socialized charismatic leadership'. *Journal of Leadership and Organizational Studies*, **17**, 33–43.

Oc, B., Bashshur, M. R., Daniels, M. A., Greguras, G. J. and Diefendorff, J. M. (2015). 'Leader humility in Singapore'. *The Leadership Quarterly*, **26**, 68–80.

Ou, A. Y., Seo, J. J., Choi, D. and Hom, P. (2017). 'When can humble top executives retain middle managers? The moderating role of top management team faultlines'. *Academy of Management Journal*, **60**, 1915-31.

Ou, A. Y., Su, Q., Chiu, C. C. and Owens, B. P. (2014a). 'Cross-cultural comparison of humility and charisma relationship with status incongruences as moderators'. In *Proceedings of the 74th Annual Meeting of the Academy of Management*, Philadelphia, 1–5 August.

Ou, A. Y., Tsui, A. S., Kinicki, A. J., Waldman, D. A., Xiao, Z. and Song, L. J. (2014b). 'Humble chief executive officers' connections to top management team integration and middle managers' responses'. *Administrative Science Quarterly*, **59**, 34–72.

Ou, A. Y., Waldman, D. A. and Peterson, S. J. (2018). 'Do humble CEOs matter? An examination of CEO humility and firm outcomes'. *Journal of Management*, **44**, 1147–73.

Owens, B. P. and Hekman, D. R. (2012). 'Modeling how to grow: An inductive examination of humble leader behaviors, contingencies, and outcomes'. *Academy of Management Journal*, **55**, 787–818.

Owens, B. P. and Hekman, D. R. (2016). 'How does leader humility influence team performance? Exploring the mechanisms of contagion and collective promotion focus'. *Academy of Management Journal*, **59**, 1088–111.

Owens, B. P., Johnson, M. D. and Mitchell, T. R. (2013). 'Expressed humility in organizations: Implications for performance, teams, and leadership'. *Organization Science*, **24**, 1517–38.

Owens, B. P., Walker, A. S. and Waldman, D. A. (2015). 'Leader narcissism and follower outcomes: The counterbalancing effect of leader humility'. *Journal of Applied Psychology*, **100**, 1203–13.

Pearce, J. L. and Xu, Q. J. (2012). 'Rating performance or contesting status: Evidence against the homophily explanation for supervisor demographic skew in performance ratings'. *Organization Science*, **23**, 373–85.

Peterson, S. J., Luthans, F., Avolio, B. J., Walumbwa, F. O. and Zhang, Z. (2011). 'Psychological capital and employee performance: A latent growth modeling approach'. *Personnel Psychology*, **64**, 427–50.

Peus, C., Wesche, J. S., Streicher, B., Braun, S. and Frey, D. (2012). 'Authentic leadership: An empirical test of its antecedents, consequences, and mediating mechanisms'. *Journal of Business Ethics*, **107**, 331–48.

Pfeffer, J. (2015). *Leadership BS: Fixing Workplaces and Careers One Truth at a Time*. New York: HarperCollins.

Phillips, J. M. and Gully, S. M. (1997). 'Role of goal orientation, ability, need for achievement, and locus of control in the self-efficacy and goal-setting process'. *Journal of Applied Psychology*, **82**, 792–802.

Piccolo, R. F. and Colquitt, J. A. (2006). 'Transformational leadership and job behaviors: The mediating role of core job characteristics'. *Academy of Management Journal*, **49**, 327–40.

Podsakoff, P. M., MacKenzie, S. B., Podsakoff, N. P. and Lee, J. Y. (2003). 'The mismeasure of man (agement) and its implications for leadership research'. *The Leadership Quarterly*, **14**, 615–56.

Pratto, F., Stallworth, L. M. and Sidanius, J. (1997). 'The gender gap: Differences in political attitudes and social dominance orientation'. *British Journal of Social Psychology*, **36**, 49–68.

Preacher, K. J. and Hayes, A. F. (2004). 'SPSS and SAS procedures for estimating indirect effects in simple mediation models'. *Behavior Research Methods, Instruments, & Computers*, **36**, 717–31.

Preacher, K. J., Zyphur, M. J. and Zhang, Z. (2010). 'A general multilevel SEM framework for assessing multilevel mediation'. *Psychological Methods*, **15**, 209–33.

Raudenbush, S. W. and Bryk, A. S. (2002). *Hierarchical Linear Models: Applications and Data Analysis Methods.* London: Sage.

Rusbult, C. E. and Van Lange, P. A. (2003). 'Interdependence, interaction, and relationships'. *Annual Review of Psychology*, **54**, 351–75.

Spreitzer, G. M., Perttula, K. H. and Xin, K. (2005). 'Traditionality matters: An examination of the effectiveness of transformational leadership in the United States and Taiwan'. *Journal of Organizational Behavior*, **26**, 205–27.

Sue-Chan, C. and Ong, M. (2002). 'Goal assignment and performance: Assessing the mediating roles of goal commitment and self-efficacy and the moderating role of power distance'. *Organizational Behavior and Human Decision Processes*, **89**, 1140–61.

Tangney, J. P. (2000). 'Humility: Theoretical perspectives, empirical findings and directions for future research'. *Journal of Social and Clinical Psychology*, **19**, 70–82.

Taylor, A. B., MacKinnon, D. P. and Tein, J. Y. (2008). 'Tests of the three-path mediated effect'. *Organizational Research Methods*, **11**, 241–69.

Van Knippenberg, D., Van Knippenberg, B., De Cremer, D. and Hogg, M. A. (2004). 'Leadership, self, and identity: A review and research agenda'. *The Leadership Quarterly*, **15**, 825–56.

Vecchio, R. P. and Brazil, D. M. (2007). 'Leadership and sex-similarity: A comparison in a military setting'. *Personnel Psychology*, **60**, 303–35.

Vecchio, R. P., Justin, J. E. and Pearce, C. L. (2010). 'Empowering leadership: An examination of mediating mechanisms within a hierarchical structure'. *The Leadership Quarterly*, **21**, 530–42.

Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S. and Peterson, S. J. (2008). 'Authentic leadership: Development and validation of a theory-based measure'. *Journal of Management*, **34**, 89–126.

Wang, A. C. and Cheng, B. S. (2010). 'When does benevolent leadership lead to creativity? The moderating role of creative role identity and job autonomy'. *Journal of Organizational Behavior*, **31**, 106–21.

Wang, L., Owens, B. P., Li, J. and Shi, L. (in press). 'Who displays humility, when does it matter, and how does it feel? Exploring the antecedents, contingencies, and affective impact of leader humility'. *Journal of Applied Psychology*, in press.

Wang, X. H. and Howell, J. M. (2010). 'Exploring the dual-level effects of transformational leadership on followers'. *Journal of Applied Psychology*, **95**, 1134–44.

Wanous, J. P. and Hudy, M. J. (2001). 'Single-item reliability: A replication and extension'. *Organizational Research Methods*, **4**, 361–75.

Weinreich, P. (1986). 'The operationalisation of identity theory in racial and ethnic relations'. In Rex, J. and Mason, D. (Eds.), *Theories of Race and Ethnic Relations*. Cambridge: Cambridge University Press, 299-320.

Welbourne, T. M., Johnson, D. E. and Erez, A. (1998). 'The role-based performance scale: Validity analysis of a theory-based measure'. *Academy of Management Journal*, **41**, 540–55.

Westphal, J. D. and Zajac, E. J. (1995). 'Who shall govern? CEO/board power, demographic similarity, and new director selection'. *Administrative Science Quarterly*, **40**, 60–83.

Zhang, Z., Wang, M. O. and Shi, J. (2012). 'Leader-follower congruence in proactive personality and work outcomes: The mediating role of leader-member exchange'. *Academy of Management Journal*, **55**, 111–30.

Zhang, Z., Zyphur, M. J. and Preacher, K. J. (2009). 'Testing multilevel mediation using hierarchical linear models problems and solutions'. *Organizational Research Methods*, **12**, 695–719.

TABLE I

Means, Standard Deviations, and Correlations for All Variables

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11
1. Follower age	32.12	9.06	—										
2. Follower gender	.55	.48	-.15*	—									
3. Leader age	41.08	8.72	.43***	-.25***	—								
4. Leader gender	.51	.50	-.06	.21**	-.33***	—							
5. Gender similarity	.60	.49	.12	-.07	-.06	.28***	—						
6. Age similarity	-9.08	7.48	.34***	.05	-.45***	.24***	.11	—					
7. Leader humility	6.13	.96	.02	-.09	.06	-.08	.10	-.06	(.92)				
8. Authentic leadership	5.91	.93	.04	-.01	.08	-.03	.09	-.02	.59***	(.90)			
9. Follower self-expansion	3.66	1.38	.14*	-.06	-.03	-.01	.25***	.13*	.14*	.11	—		
10. Self-efficacy	6.02	.78	.03	-.08	.11	-.04	.01	.00	.15*	.13*	.28***	(.91)	
11. Task performance	5.72	.98	.04	.02	.09	.05	.05	-.06	.18**	.29***	.29***	.17**	(.85)

Note. $n = 256$.

*$p < .05$. **$p < .01$. ***$p < .001$.

TABLE II

Procedure of Structural Equations Modeling Comparison

Model	χ^2	df	χ^2/df	CFI	TLI	RMSEA	$\Delta\chi^2$	Δdf	AIC
Hypothesized Model A: Three-path mediation model	890.21	425	2.09	.91	.89	.07			842
Hypothesized Model B: Full model with moderations (Final Model)	856.40	423	2.02	.91	.90	.06	33.81***	2	819
Alternative Models based on Hypothesized Model B									
Alternative Model 1: Direct effects only	900.14	426	2.11	.90	.89	.07	43.74***	3	848
Alternative Model 2: Self-efficacy as mediator only	896.88	426	2.10	.90	.89	.07	40.48***	3	846
Alternative Model 3: Self-expansion as mediator only	887.97	426	2.08	.91	.90	.07	31.57***	3	840
Alternative Model 4: Reversed mediation (self-efficacy → self-expansion)	865.10	423	2.04	.91	.90	.06	8.7***	0	824
Alternative Model 5: Reversed causality (self-expansion → leader humility)	890.54	423	2.10	.90	.89	.07	34.14***	0	835

Note. Hypothesized Model B is compared to hypothesized Model A. Alternative models are compared to hypothesized Model B.
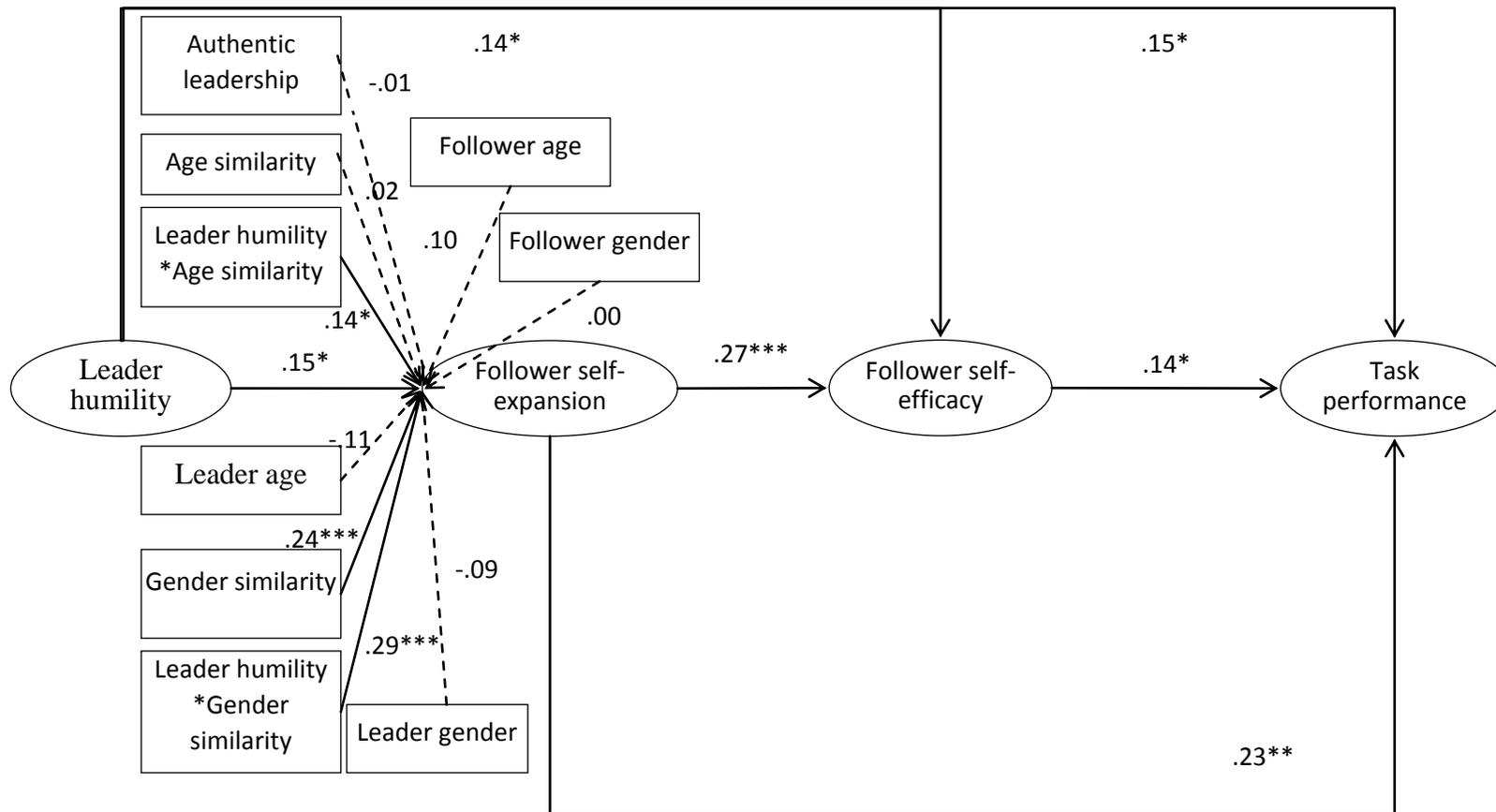
***$p < .001$.

FIGURE 1

The Theoretical Model
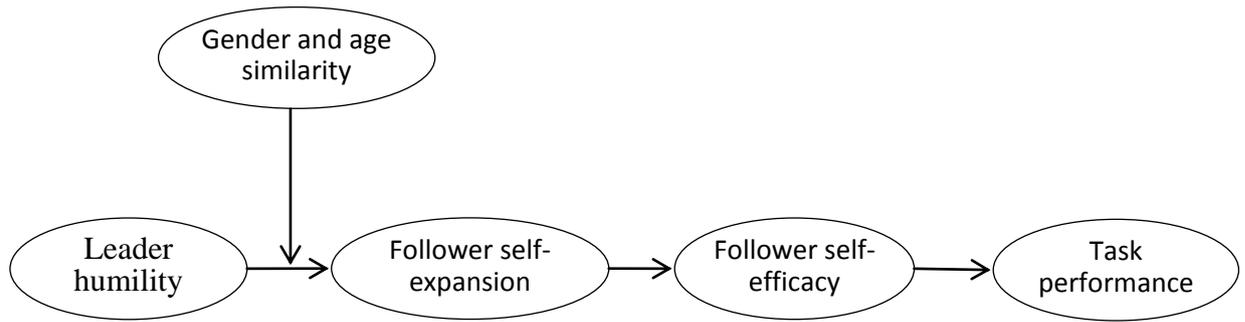
FIGURE 2

The Structural Model

Note. Coefficients are standardized coefficients.

p < .05, **p* < .01, ****p* < .001

FIGURE 3

The Interactive Effect of Leader Humility and Gender Similarity on Follower Self-
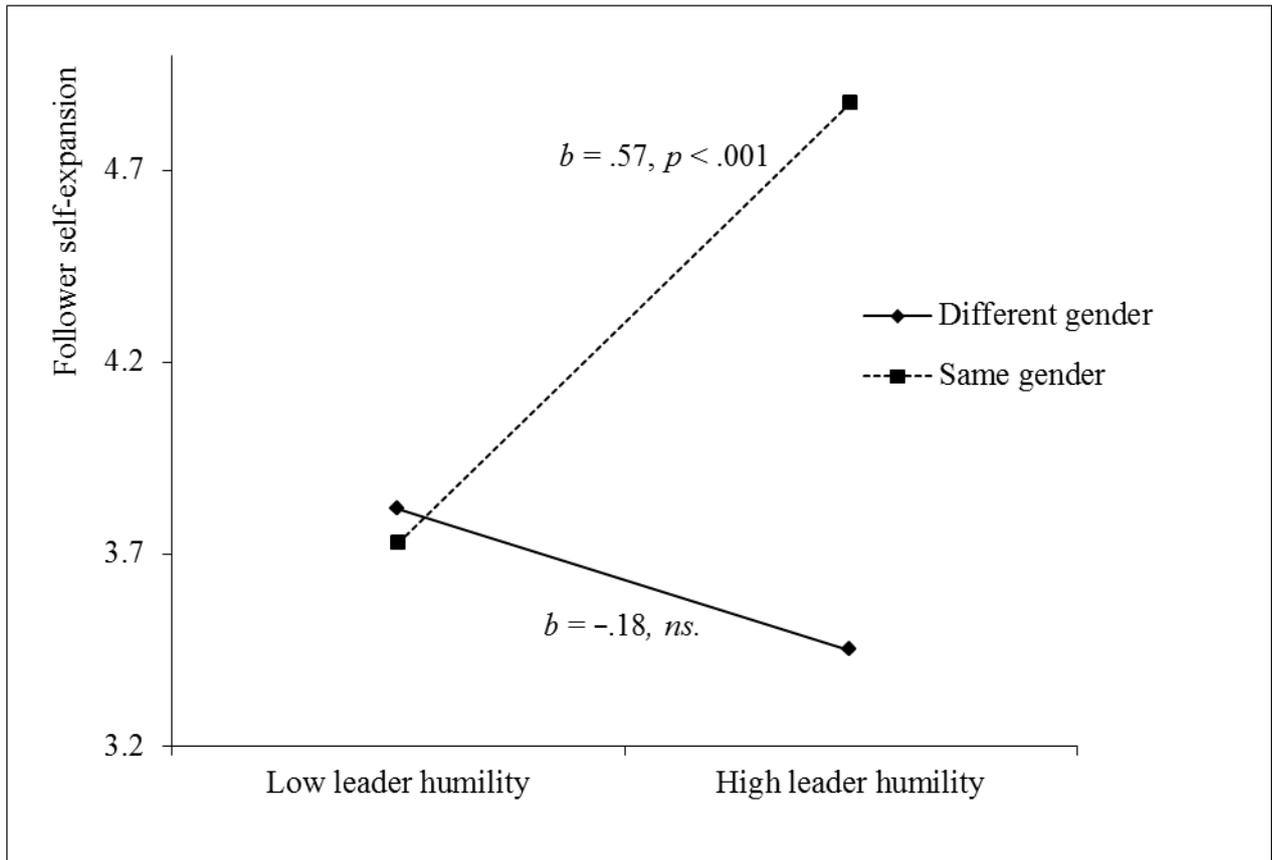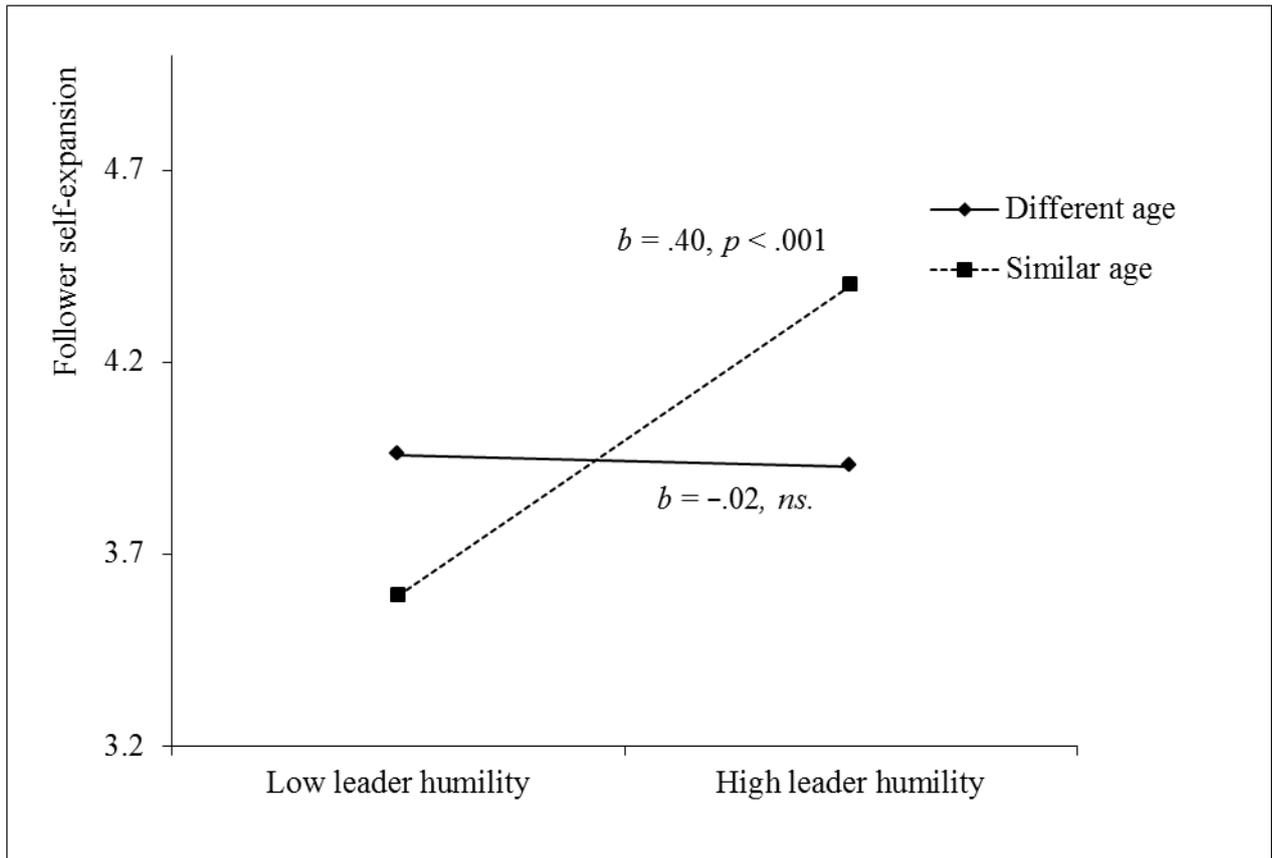
Expansion

FIGURE 4

The Interactive Effect of Leader Humility and Age Similarity on Follower Self-

Expansion

APPENDIX A

Measurement of Follower Self-Expansion

Please circle the picture that best describes the relationship with your leader. (The intersection between two circles is regarded as the overlap between you and your leader in resources, experiences, and identities.)