


RESEARCH ARTICLE

Watching you descend, I help others rise: the influence of leader humility on prosocial motivation

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Abstract

The fundamental nature of humility and prosocial motivation entails transcending self-interest to enact behaviors that benefit others. We theorize that leader humility may enact a self-transcendent contagion effect that will manifest in enhanced follower prosocial motivation. Due to the fundamental nature of humility, this construct holds great promise in understanding how contextual signals (i.e., leader behaviors) shape prosocial motivation in followers. In this study, we find that leader humility impacts follower prosocial motivation through followers' perception of work meaningfulness. Specifically, we found that leader humility is positively related to prosocial motivation. We also found that this relationship is mediated by followers' perception of work meaningfulness, and that this mediation is moderated by followers' perception of relational vitality. Theoretical and practical implications are discussed.

Keywords: Leader humility; prosocial motivation; work meaningfulness

Prosocial motivation has been found to be a key mechanism for moral behavior (De Cremer, Mayer, van Dijke, Schouten, & Bardes, 2009; Grant & Campbell, 2007), leading to prosocial behaviors such as altruism and social justice (Michie, 2009). The fundamental nature of humility and prosocial motivation entails transcending self-interest to enact behaviors that benefit others. As leader behavior is powerful in shaping follower attitudes and behavioral norms (Keltner, Gruenfeld, & Anderson, 2003; Yukl, 2012), we theorize that leader humility may enact a self-transcendent contagion effect that will manifest in enhanced follower prosocial motivation. Due to the fundamental nature of humility, this construct holds great promise in understanding how contextual signals (i.e., leader behaviors) shape prosocial motivation in followers. Despite the potential importance of this link, it has not been sufficiently theorized or explored.

While many other leadership studies have shown positive effects on prosocial behavior, we focus this study on the mechanism of prosocial motivation. The construct of prosocial motivation is extremely important in the workplace, as organizations rely on the supra-contractual behaviors that such motivation produces to achieve high-performance team outcomes (Bass, 1985; Menges, Walter, Vogel, & Bruch, 2011). Therefore, understanding how to foster prosocial motivation is vital. In our study, we propose that leader humility positively relates to follower prosocial motivation through the mediation of followers' perception of work meaningfulness. Given that followers dedicate significant cognitive resources to assess the meanings that undergird leader behaviors (Keltner, Gruenfeld, & Anderson, 2003), we anticipate that leaders that enact humility in their behaviors may cause followers to pause and consider the meaning of such behaviors,

which may stimulate their experience of work meaningfulness. Further, we theorize that this relationship is moderated by followers' perception of relational vitality. Followers differ in the relationships they have with the same leader (Graen & Uhl-Bien, 1995; Maslyn & Uhl-Bien, 2001), and we accordingly anticipate that the prosocial motivation of followers who lack a strong relational connection with the leader may be particularly contingent upon those followers experiencing meaningfulness in their work independent of the leader.

Leaders may benefit from our line of theorizing in that it suggests that leaders, who have limited personal and professional resources to allocate to their leadership roles (Hobfoll, 1989), may wish to decide to invest their time and energy in either developing high-quality relationships with followers or creating a meaningful work culture. In organizations where creating work-related meaning is challenging, the development of the relationship between a leader and their followers may be paramount; in organizations that lend themselves to meaning making (e.g., firefighting, human service organizations, educational organizations), the leader may find it more useful to focus on the development of an organizational culture infused with meaning than to develop strong relationships with followers. This phenomenon may be accentuated in large organizations where it is difficult for the leader to develop relationships with each follower (Schaubroeck et al., 2012). Given the paradoxical tensions that influence how a leader allocates their time (Smith, Besharov, Wessels, & Chertok, 2012), this line of research may be fruitful for leaders.

The commitment of people to helping others has often been associated with the humility of their leaders (see, e.g., Lee, Lyubovnikova, Tian, & Knight, 2019). At face value, there seems to be a natural link between leader humility and follower prosocial motivation, both directly through supportive behaviors (Paustian-Underdahl, Shanock, Rogelberg, Scott, Justice, & Altman, 2013) and encouragement by the leader and indirectly through the example the leader sets of a self-transcendent individual dedicated to helping others. As it turns out, there is a well-established link between leader behaviors and styles and follower prosocial motivation (Chiaburu, Smith, Wang, & Zimmerman, 2014; De Cremer et al., 2009; McNeely & Meglino, 1994; Robertson & Barling, 2013).

Studies have found that leader behaviors can influence follower prosocial motivation through various pathways: when leaders form high-quality relationships with followers, for instance, those followers tend to reciprocate through prosocial behaviors (Ilies, Nahrgang, & Morgeson, 2007). Job satisfaction has also been linked to prosocial motivation, a link that has been explained as a process of social exchange (Blau, 1964), as individuals tend to reciprocate the behaviors of those who benefit them (McNeely & Meglino, 1994). Given that a number of the prototypical behaviors of humble leaders tend to focus on the development and appreciating the merits of followers (Owens & Hekman, 2012), it seems plausible that leader humility could be generative of follower prosocial motivation. Yet, surprisingly, this link has not to our knowledge been unpacked to understand how, and under what conditions, it is activated.

Followers of humble leaders may also experience prosocial motivation for other reasons. Job satisfaction is generally linked to prosocial motivation, as is positive mood (McNeely & Meglino, 1994). Individuals who experience positive emotions such as pride and gratitude also tend to engage in prosocial behaviors such as altruism and social justice (Michie, 2009). Followers of humble leaders seem likely to experience pride in their work, as humble leaders tend to encourage their workplace development (Owens & Hekman, 2012), and foster gratitude toward the leader for their willingness to admit their own mistakes and limitations rather than lord their accentuated organizational status over them (Owens & Hekman, 2012).

Viewed in concert, it seems plausible that followers of humble leaders may experience prosocial motivation. This motivation, if induced by self-transcendent contagion initiated by the leader, may produce not only an impetus for prosocial behaviors toward the leader, but also toward the team and greater society. One study of environmental leaders, for example, found that they induce follower harmonious environmental passion and workplace pro-environmental behaviors (Robertson & Barling, 2013).

Investigating such a link between leader humility and prosocial motivation is of both theoretical and practical significance. Theoretically, humility is construed as a virtue that has rich historical roots in theological and philosophical literatures; it thus has strong moral underpinnings relative to other psychological constructs (Owens & Hekman, 2016; Owens, Johnson, & Mitchell, 2013). In spite of its connection with business ethics, prior literatures have not yet elucidated how leader humility unpacks its impact on ethics-related outcomes (e.g., prosocial motivation) or have only ambiguously implied its ethics-related impact. Further, prosocial motivation is an ethics-related construct that is reflected in and influenced by both traits and psychological states which coincide with the construct of humility – a malleable attribute (or modifiable trait) that has a moral foundation (Grant, 2008; Owens & Hekman, 2016; Owens, Johnson, & Mitchell, 2013; Owens, Walker, & Waldman, 2015).

In sum, since prosocial motivation is known as a key driver of one's adherence to moral principle (Grant, 2008), our research questions, from a theoretical perspective, extend the construct of leader humility to the realm of workplace business ethics and further clarify its nomological network in relation to ethics-related constructs. Practically, prosocial motivation is known to boost performance, productivity, and persistence (Grant, 2008). Hence, understanding how leader humility affects followers' prosocial motivation may yield significant implications for how a firm manages its competitive advantage.

This research makes four important contributions to the literature. First, a majority of prior research focuses on testing the moderators for the relationships between leader humility and its outcomes, whereas it is unclear about the theoretical link (i.e., mediating mechanism) between leader humility and individual-level outcomes (Rego, Cunha, & Simpson, 2018). Building on social information processing (SIP) theory (Salancik & Pfeffer, 1978) and other relevant prior studies (e.g., Rego *et al.*, 2017), we propose an integrative moderated-mediation model and assess the mediating role of work meaningfulness and the contextual factor of the quality of the follower's relationship with the leader in influencing the effects of leader humility on organizational outcomes. In doing so, we examine whether the relationship between leader humility and follower prosocial motivation is mediated by followers' perception of work meaningfulness, and whether this mediation is moderated by followers' perception of relational vitality. Second, we extend theory on leader humility, as the current study represents the first empirical assessment to our knowledge of the relationship between leader humility and prosocial motivation. Finally, as far as we are aware, it is the first empirical study to establish the contextual factor of the quality of the follower's relationship with the leader in influencing the effects of leader humility on organizational outcomes.

Theoretical background and hypotheses development

Prosocial motivation is an allocentric psychological state in which an organizational actor is focused on making a positive impact on others (Grant, 2007). Put simply, it's the desire to dedicate one's effort toward benefiting others (Grant, 2008). Prosocial motivation is a varying internal state usually induced by others (e.g., leaders) (Chaplin, John, & Goldberg, 1988). Given its association with higher levels of performance, productivity, and persistence across various jobs, tasks, and extra-role behaviors (Grant, 2008), it should be no surprise that promoting follower prosocial motivation is often a key objective of organizational leaders. In fact, one of the stated goals of transformational leadership, the most researched theory of leadership – with more articles published on it than on all other leadership theories combined (Spector, 2014) – is for followers to go above and beyond contractual obligations for the betterment of the team (Bass, 1985; Harms & Crede, 2010), a form of prosocial motivation.

To conceptualize how leader humility might influence follower prosocial motivation, it's important to first understand that leadership is, at its core, an interpersonal process (Graen & Uhl-Bien, 1995). Accordingly, leader humility has been described as an interpersonal

characteristic that emerges within a social context (Owens & Hekman, 2016; Owens, Johnson, & Mitchell, 2013; Owens, Walker, & Waldman, 2015). Leader behaviors that have been found to emerge from this interpersonal social construction include emphasizing the strengths and contributions of followers, acknowledging one's own limitations and challenges (viewing oneself accurately), and modeling a commitment to learning (teachability) (Owens & Hekman, 2012, 2016; Owens, Johnson, & Mitchell, 2013). This operationalization of humility is empirically distinct from related theories such as transformational leadership (Hu, Erdogan, Jiang, Bauer, & Liu, 2018; Owens & Hekman, 2016) and trait measures such as the Big Five, modesty, and learning goal-orientation (Owens, Johnson, & Mitchell, 2013).

Over the last few decades, many practitioners and scholars alike have suggested that humility can enhance leader effectiveness (Chiu, Owens, & Tesluk, 2016; Collins & Porras, 1994). Despite the plethora of propositions arguing for the importance of leader humility in organizations, very few had been confirmed by empirical study (Owens, Johnson, & Mitchell, 2013) until a spate of studies emerged over the last 5 years (see, e.g., Chiu, Owens, & Tesluk, 2016; Oc, Bashshur, Daniels, Greguras, & Diefendorff, 2015; Ou, Tsui, Kinicki, Waldman, Xiao, & Song, 2014; Owens & Hekman, 2016; Rego et al., 2017, 2018, 2019).

Leader humility and follower prosocial motivation

As humility is an interpersonal characteristic grounded in self-transcendence (Wang, Owens, Li, Shi, Wang, & Owens, 2018), it is not surprising that, through social contagion processes in which followers emulate leaders' behaviors (Wood & Bandura, 1989) and emotions (Johnson, 2008; Sy, Côté, & Saavedra, 2005), followers of humble leaders might also develop a self-transcendent perspective that fosters prosocial motivation. In fact, a study of 161 teams found that when leaders express humility, followers follow suit and emulate their leaders' humble behaviors (Owens & Hekman, 2016). These cascading effects of social contagion impel followers to strive toward the highest potential for the team (Owens & Hekman, 2016). It seems plausible that the collective promotion focus of the followers of humble leaders will lead to higher prosocial motivation which, after all, is associated with a team rather than individual focus.

Hence, it seems likely that leaders who express humility are likely to foster a prosocial motivation in followers that leads to self-transcendent behaviors. According to Owens & Hekman (2016: 1091; emphasis ours), 'As teams watch their leaders give away some of their power by admitting limitations and mistakes, allowing themselves to be taught rather than doing all the teaching, and drawing attention to others' contributions and strengths, *they reinforce a cooperative, others-oriented interactive logic*; they send a message about the value of collective striving over personal status seeking.' Moreover, in addition to corroborating earlier work by Owens & Hekman (2012) that identifies the recognition of follower achievements and modeling teachability as prototypical behaviors of humble leaders, a qualitative study found that humble leaders tend to work with their followers toward the collective good (modeling prosocial motivation), even if it involves staying late to complete a project (Oc et al., 2015). This reasoning leads us to our first hypothesis.

Hypothesis 1: Leader humility is positively related to follower prosocial motivation.

Work meaningfulness as a mediator of leader humility and follower prosocial motivation

Work meaningfulness is associated with the perceived value of a work purpose or objective that an individual strives toward as a part of their work role, as assessed by an individual in relation to their own beliefs (Spreitzer, 1995). The sense of meaning an individual derives from their work is critical, as it enhances the individual's self-regulatory abilities and buffers them from the negative impact of stress (see Baumeister & Landau, 2018 for a recent review).

The most frequently utilized framework for elaborating the influence of leader humility on follower and organizational outcomes is SIP theory (Chiu, Owens, & Tesluk, 2016; Rego *et al.*, 2019; Salancik & Pfeffer, 1978), which proposes that when leaders enact humble behaviors, they provide social cues to followers that reflect relevant and salient information followers utilize to ‘interpret the *meaning* of their environments’ (Wang *et al.*, 2018: 3; emphasis ours). It seems plausible that leader humility will enhance followers’ perceptions of work meaningfulness, as the social cues leaders transmit to followers are embedded in self-transcendent behaviors (Tangney, 2009) that deemphasize the self and emphasize how one’s behaviors can benefit others (Owens & Hekman, 2012).

Specifically, Owens and Hekman (2012) find that humble leaders model teachability, which encourages their followers to embrace their work roles with a learning orientation that is likely to enhance the meaningfulness they encounter in their work. In addition, such leaders emphasize the developmental growth of followers. Plausibly, followers that are encouraged to think beyond their work roles to the long-term impact they would like to make in their careers are likely to experience more meaningfulness in their work roles. In addition, one of the foundations of workplace meaningfulness is personal growth and development (Fletcher & Schofield, 2019; Pratt & Ashforth, 2003), which leader humility helps to legitimize and support in followers (Owens & Hekman, 2012).

One study found humility to be positively associated with epistemic curiosity, or the motivation to learn and know how things work (Porter & Schumann, 2018). It is plausible that when humble behaviors emerge in the followers of humble leaders through social contagion effects, these followers become more curious about the nature of their work, which is likely to induce more meaningfulness for them in the workplace.

The Russian philosopher Nikolai Berdyaev (2018) once wrote, ‘Bread for myself is a material question. Bread for my neighbor is a spiritual one.’ It is conceivable that leaders who express humility might induce followers to reflect on the meaning of such behaviors, which may contribute to an increased experience of work meaningfulness. In fact, followers tend to allocate extensive cognitive and attentional resources to the nuanced meanings that underlie leader behaviors, as these meanings are likely to impact their livelihoods (Keltner, Gruenfeld, & Anderson, 2003). Perhaps for this reason, leader humility has been found to induce empowering leadership behaviors that augment work meaningfulness. The reason is that as leaders communicate self-transcendent objectives, they help followers to understand and find meaning in the value of their work as it relates to the organization’s mission (Ou *et al.*, 2014).

The sense of meaning an organizational actor experiences at work is likely to induce prosocial motivation, as the self-regulation benefits they receive from enhanced meaningfulness are likely to enable them to bring their actions more consistently in line with standards valued by their work group (Baumeister & Landau, 2018). As a consequence, ‘selfish and other antisocial actions are curbed’ (p. 4).

The idea that the sense of meaningfulness followers experience while working for a humble leader might lead to follower prosocial motivation is well-grounded in previous research. Leader humility has been linked to an acceptance of something greater than oneself (Ou *et al.*, 2014, 2018) and a connection with one’s wider community and an appreciation of the value of others (Tangney, 2009). These themes, along with a transcendent self-concept that shifts one’s focus from oneself to others, are both intrinsic to and recognized in numerous humility descriptors (Ou, Waldman, & Peterson, 2018). Further, leader humility has been shown to be a key contextual factor that facilitates moral efficacy and behavior in employees (Owens, Yam, Bednar, Mao, & Hart, 2019). Humility has also been identified as one of the key organizational virtues which collectively form the foundation of moral actions in the workplace (Cameron & Caza, 2003).

While this is the first time, to our knowledge, that work meaningfulness has been found to mediate the effects of leader humility, a previous study has found the leader’s balanced processing

of information, which is the capacity to objectively assess information and seek out the opinions of followers before making decisions (Avolio & Mhatre, 2012; Rego, Cunha, & Simpson, 2018), to mediate the effects of leader humility on team effectiveness. It seems likely that followers will perceive their work to be more meaningful when working with such a leader who cares sufficiently to solicit their perspectives on organizational issues.

Hypothesis 2: Followers' perception of work meaningfulness mediates the relationship between leader humility and follower prosocial motivation.

Followers' perception of relational vitality as a boundary condition

Previous work has found that while the effects of leader humility on follower behaviors are generally positive (e.g., Chiu, Owens, & Tesluk, 2016; Rego et al., 2017), they can depend on contextual factors. For example, Bharanitharan, Chen, Bahmannia, and Lowe (2018) found that leader humility has a contradictory influence on follower voice behaviors depending on the existence of a secure or insecure attachment to the leader.

Considering that the effect organizational actors experience is a critical psychological domain that influences organizational events (Brief & Weiss, 2002; Wang et al., 2018), it is feasible that an affective variable might moderate the effects of leader humility on important organizational outcomes. In fact, based on SIP theory (Salancik & Pfeffer, 1978), it is generally considered that humble leader behaviors such as acknowledging self-limitations and mistakes and emphasizing follower strengths and contributions (see Owens & Hekman, 2012) communicate social cues to followers relevant to their social construction of the workplace that produce positive affective responses within followers (Wang et al., 2018). We hypothesize that one of these affective responses is a feeling of relational vitality in the follower's relationship with the leader.

Relational vitality is concerned with emotions of high positive intensity and an enhanced sense of positive energy associated with one's relationship with a leader or coworker (Dutton & Heaphy, 2003) that leads to subjective feelings of being alive and alert (Vinarski-Peretz, Binyamin, & Carmeli, 2011). A related term, relational energy, refers to an accentuated level of psychological resourcefulness produced by workplace interactions that are inclusive of the positive emotions of vitality, vigor, and stamina (Owens, Baker, Sumpster, & Cameron, 2016). Relational energy has been construed as a worthy variable in capturing the affective influence of leader humility based on direct leader–follower interpersonal interactions that have been verified empirically (Owens et al., 2016; Wang et al., 2018).

Integrated model

To integrate these relationships, we propose a moderated mediation model in which followers' perception of relational vitality moderates the indirect relationship between leader humility and follower prosocial motivation. Other empirical studies have found moderated-mediation effects in the influence of leader humility on important organizational outcomes (e.g., Chiu, Owens, & Tesluk, 2016; Hu et al., 2018). In our model, when followers' perception of relational vitality is high, humble leaders will have weaker influence on shaping followers' perception of work meaningfulness. When followers' perception of relational vitality is low, on the other hand, leader humility bears a stronger influence on followers' perception of work meaningfulness and, subsequently, follower prosocial motivation.

Hypothesis 3: Followers' perception of relational vitality moderates the indirect effect of leader humility on follower prosocial motivation through followers' perception of work meaningfulness, such that the indirect effect will be stronger under low followers' perception of relational vitality than under high followers' perception of relational vitality.

Method

Participants and procedures

Participants were employees from a series of organizations in India. Organizations were targeted for data collection based on their involvement in an informal capacity building network for non-profit organizations in and around Madras, India. As the central organization of this network had access to these organizations and was able to follow-up on their completion of surveys, the data collection was very robust with a response rate of 84%. Surveys were distributed to the employees from the targeted organizations. They were assured of the confidentiality of their responses so that they can answer survey questions as honest as possible. A total of 247 individuals provided valid responses that can be included in data analyses. These individuals were reasonably representative of both genders (57% were male) and more than 90% had university degrees or above. The distribution in organizational hierarchical rankings for respondents was widely varied, with work titles such as secretary, administrative assistant, coordinator, technical specialist, project manager, regional manager, and senior manager, etc. The leaders whom they report to have job titles, such as chief executive officer, chairman, executive director, project director, president, and principal, etc. The respondents were working within a range of fields of activities, such as education, environment, healthcare, elderly care, and disabilities, etc. Respondents were told to provide demographic information (i.e., gender, age, and education) and to rate relational vitality, work meaningfulness, and prosocial motivation. In addition, they were also requested to rate the humility of the leaders they directly reported to.

We see unique theoretical benefits for testing our specific model in this unique culture because India scores twice as high on individualism compared to China but almost half as high as the United States (Hofstede, Hofstede, & Minkov, 2010). So India represents a moderate level of individualism compared to the two countries (China and the United States) which anchor most of the extant leader humility research. We propose that testing leader humility's effect on prosocial motivation in a moderately individualistic country is theoretically fitting because individualism refers to the degree to which people are expected to take care of themselves, their tendency to define themselves independent of groups, and have an internal locus of control (Waterman, 1984). On the other end of the spectrum, collectivism refers to the penchant to define oneself as part of the group and to subsume personal interest for the good of the group (Hofstede, 1997), making it more likely that prosocial motivation will be culturally driven. Each of these culture-based tendencies, subsumed under either individualism or collectivism, could reasonably shape prosocial attitudes. Thus, by testing the effect of leader humility on prosocial motivation in a moderately individualistic culture, we in effect control for the impact of cultural tendencies in shaping our results, giving us more confidence in our proposed relationships.¹

We followed a set of best practices during data collection to minimize the impact of common method bias on our results (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). First, we assured participants of the anonymity of their responses to reduce their tendency to be socially desirable, lenient, and/or acquiescent in answering the survey items. Second, to minimize the priming effects, we randomly ordered the survey items rather than group them in the order which shows how they might be associated. Third, we used time-lagged design by introducing a time interval during the data collection process (i.e., a two-phase data collection which is about 6–8 weeks apart); this method of temporal separation has been proven to be the most effective method to mitigate common method bias (Johnson, Rosen, & Djurdjevic, 2011).

¹In addition, though this sample is constrained to one country, relative to other leadership research in general and leader humility research in particular, our research is among the most diverse set of organizational levels of leadership that the literature has seen. This type of sample heterogeneity is a strength of our sampling because it helps generalize our results across many organizational levels.

Measures

Leader humility

Owens, Johnson, and Mitchell (2013) defined expressed humility in a parsimonious and theoretically meaningful way, and they developed a robust measure that shows evidence for its nomological, construct, and predictive validity in organizational contexts. This scale has been used in prior studies to measure leader humility (e.g., Hu et al., 2018) and we also utilized Owens, Johnson, and Mitchell (2013) to measure leader humility in the present study. Respondents were asked to report the humility of the leaders they directly reported to on a 5-point scale (1 = strongly disagree; 5 = strongly agree). A sample item is 'my leader is willing to learn from others.' The scale α reliabilities for expressed humility in Owens, Johnson, and Mitchell (2013) were .94 for Study 1, .94 for Study 2, and .97 for Study 3. The α reliability for leader humility in our study is .92, which is good and comparable to the α reliabilities reported in Owens, Johnson, and Mitchell (2013).

Relational vitality

We used Vinarski-Peretz, Binyamin, and Carmeli (2011) scale to measure relational vitality between followers and leaders. This scale has demonstrated acceptable model fit and significant factor loadings (Vinarski-Peretz, Binyamin, & Carmeli, 2011). Respondents reported their relational vitality with their leaders on a 5-point scale (1 = strongly disagree; 5 = strongly agree). A sample item is 'my relationship with my leader makes me feel alive at work.' Our study exhibited an α reliability of .93 for relational vitality, which is satisfactory and comparable to the α values of .95 in Study 1 and .88 in Study 2 according to Vinarski-Peretz, Binyamin, and Carmeli (2011).

Work meaningfulness

Work meaningfulness was measured based on Spreitzer (1995). This scale was used in prior research (e.g., Colbert, Bono, & Purvanova, 2016). A sample item is 'the work I do is very important to me.' Respondents reported on this scale on a 5-point scale (1 = strongly disagree; 5 = strongly agree). The α value of work meaningfulness in our study is .88, which is good and greater than the α values of .85 in Time 1 and Time 2 reported in Spreitzer (1995).

Prosocial motivation

Prosocial motivation was measured based on Grant (2008). Prosocial motivation was shown to be distinct from intrinsic motivation, and demonstrated good model fit (Grant, 2008). This scale was utilized in prior research (e.g., Wright, Christensen, & Pandey, 2013). A sample item is 'it is important for me to do good for others through my work.' The reliability value of prosocial motivation in the present study is .96, which is great and higher than the reliability values of .90 in Study 1 and .91 in Study 2 as reported in Grant (2008).

Control variables

In line with prior research (e.g., Frieder, Wang, & Oh, 2018), employees' gender, age, and education level were included as control variables.

Common method bias check

In line with prior research (e.g., Greenbaum, Mawritz, & Piccolo, 2015), we conducted Harman's single-factor test by placing all pertinent variables into an unrotated exploratory factor analysis. If there is a noticeable amount of common method bias, then a single factor may appear from the exploratory factor analysis or one factor may explain a majority of the variance in variables (Greenbaum, Mawritz, & Piccolo, 2015). In sum, the results indicated that no single factor appeared and the first factor (i.e., the most dominant factor) only explained 33.17% of the total variance, thus confirming that no single factor accounted for a majority of the variance

of all pertinent variables. Hence, the impact of common method bias on our results is minimal or negligible.

Analysis

We used the PROCESS developed by Hayes (2013) to test all hypothesized relationships. Since we formulated two separate hypotheses for two different models (one for mediation and the other one for moderated mediation), we conducted two tests to correspond to the separate hypotheses/models which we proposed. This practice is consistent with prior research (e.g., Ng, Ang, & Chan, 2008) which followed the approach to perform separate tests for mediation and moderated mediation models. Although the moderated mediation model is more comprehensive than the mediation model, we believe there are two additional reasons why the examination of mediation model is still relevant. First, partialling out the effect of moderator in the mediation model is not necessary or applicable because the mediation model does not involve the moderator. Second, a significant mediation model serves as an important indicator to show whether it is still necessary to continue the test for moderated mediation.

Results

Descriptive statistics and zero-order correlations among variables were reported in Table 1. Figure 1 is a model that shows all hypothesized relationships. For the parsimony and clarity of reporting, we also showed the result for each hypothesized relationship in Figure 1. Table 2 showed the results of mediation analyses. The results (see Table 2) showed that leader humility is positively related to follower prosocial motivation ($B = .34, p < .01$), thus lending support to hypothesis 1. The indirect effect from leader humility to prosocial motivation via work meaningfulness (see Table 2) is statistically significant (effect = .14, $CI_{95\%} = [.02, .32]$), indicating that work meaningfulness mediates the relationship between leader humility and followers' prosocial motivation. Hypothesis 2 is therefore supported.

Hypothesis 3 posited that relational vitality moderates the indirect effect of leader humility on followers' prosocial motivation through work meaningfulness, such that the indirect effect will be stronger under low relational vitality than under high relational vitality. Table 3 exhibited the results of moderated mediation analyses. First, as shown in lower section of Table 3, the index of moderated mediation is $-.12$ ($CI_{95\%} = [-.27, -.01]$), which shows that the effect of moderated mediation is statistically significant (Hayes, 2018). Further, the conditional indirect effect was stronger at low (effect_{low}_[-1 SD] = .13, $CI_{95\%} = [.01, .29]$), rather than high (effect_{high}_[+1 SD] = $-.04$, $CI_{95\%} = [-.23, .06]$) levels of relational vitality. The interaction plot (Figure 2) also showed a stronger relationship when relational vitality is low than when relational vitality is high. Taken altogether, hypothesis 3 is supported.

Finally, we examined the R^2 values of our models to assess the practical significance of them. The R^2 values for four tested models are .06, .40, .19, and .40. Cohen (1988) suggested the benchmarks of .1, .3, and .5 for small, medium, and large effect sizes, which can be translated into .01, .09, and .25 for small, medium, and large R^2 values. Based on these benchmarks, two of our models exceeded the benchmark of a large R^2 value, one of our models exceeded the benchmark of a medium R^2 value, and one of our models exceeded the benchmark of a small R^2 value. It should be noted that Cohen (1988) benchmarks are for bivariate relations rather than multivariate models. To address this issue, we also compared R^2 values from our models to the R^2 values which were reported in prior leader humility research. We found that the R^2 values in our study are comparable to the R^2 values in prior studies concerning leader humility (e.g., Qin, Chen, Yam, Huang, & Ju, 2020). Taken altogether, we found some evidence to support the practical significance of our models.

Table 1. Means, standard deviations, and zero-order correlations

	Mean	SD	1	2	3	4	5	6	7
1. Gender	.57	.51	1						
2. Age	36.21	10.75	.12	1					
3. Education level	4.58	.63	.11	.05	1				
4. Leader humility	4.21	.64	-.06	.12	-.10	(.92)			
5. Relational vitality	4.20	.73	.06	.03	-.14*	.36**	(.93)		
6. Work meaningfulness	4.34	.65	-.07	.04	-.01	.23**	.35**	(.88)	
7. Prosocial motivation	4.52	.76	-.06	.05	-.03	.40**	.22**	.57**	(.96)

Note. *N* = 247. SD, standard deviation. Gender was dummy coded (female = 0; male = 1); age was measured in years; education level was measured on a 5-point scale (elementary school = 1; junior high school = 2; high school = 3; university degree = 4; graduate degree = 5). Reliability estimates were reported in parentheses across the diagonal.

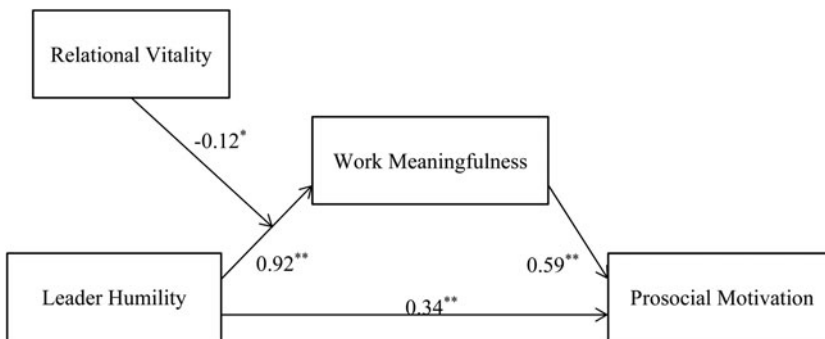


Fig. 1. Proposed moderated mediation model.

Note. Gender, age, and education level of employees were included as control variables for this model. **p* < .05; ***p* < .01.

Discussion

The present study set out to advance our understanding of the influence of leader humility on prosocial motivation. As a core mechanism of ethical behavior, understanding more about the contextual antecedents of prosocial motivation helps to further our theoretical and practical insights about how to foster prosocial motivation, and subsequent moral behavior, in the workplace. Previous research, rooted in the principle of equifinality (the influence of leaders on followers may emerge through multiple pathways; Morgeson, DeRue, & Karam, 2010), has found that leaders can influence important organizational outcomes through various mechanisms (Rego et al., 2019). In this study, we find that leader humility impacts follower prosocial motivation through followers’ perception of work meaningfulness. Specifically, we found that leader humility is positively related to prosocial motivation. We also found that this relationship is mediated by followers’ perception of work meaningfulness, and that this mediation is moderated by followers’ perception of relational vitality.

The importance of leader–follower relationships has been emphasized by many well-researched leadership theories such as transformational leadership (Harms & Crede, 2010), LMX (Graen & Uhl-Bien, 1995), authentic leadership (Gardner, Avolio, Luthans, May, & Walumbwa, 2005), and servant leadership (Greenleaf, 1977; Lee et al., 2019). Our study adds an interesting finding to these well-developed theories: that the quality of the leader–follower relationship, which we have partially measured with the proxy of relational vitality, bears more influence on how humble leaders foster follower prosocial motivation only when followers do not

Table 2. Mediation analyses based on PROCESS

	Mediator = work meaningfulness		DV = prosocial motivation	
	B	SE	B	SE
Intercept	3.29**	.43	.53	.45
Gender	-.08	.08	-.00	.08
Age	.00	.00	-.00	.00
Education level	.02	.07	.00	.06
Leader humility	.23**	.06	.34**	.06
Work meaningfulness	-	-	.59**	.06
R ²	.06**		.40**	
Direct and indirect effects		Effect	LL CI	UL CI
Direct effect of leader humility on prosocial motivation		.34	.22	.46
Indirect effect of leader humility on prosocial motivation		.14	.02	.32

B, unstandardized regression weight; SE, standard error; LL CI and UL CI, lower and upper limits of 95% confidence intervals; DV, dependent variable.
 ***p* < .01.

Table 3. Moderated mediation analyses based on PROCESS

	Mediator = work meaningfulness		DV = prosocial motivation	
	B	SE	B	SE
Intercept	-.78	1.00	.53	.45
Gender	-.13*	.08	-.00	.08
Age	.00	.00	-.00	.00
Education level	.05	.06	.00	.06
Leader humility	.92**	.24	.34**	.06
Relational vitality	1.11**	.24	-	-
Leader humility × relational vitality	-.20**	.06	-	-
Work meaningfulness	-	-	.59**	.06
R ²	.19**		.40**	
Direct and indirect effects		Effect	LL CI	UL CI
Direct effect of leader humility on prosocial motivation		.34	.22	.46
Conditional indirect effect of leader humility on prosocial motivation at:				
Low relational vitality (-1 SD)		.13	.01	.29
High relational vitality (+1 SD)		-.04	-.23	.06
Index of moderated mediation		-.12	-.27	-.01

B, unstandardized regression weight; SE, standard error; LL CI and UL CI, lower and upper limits of 95% confidence intervals; SD, standard deviation; DV, dependent variable.
 p* < .10; *p* < .01.

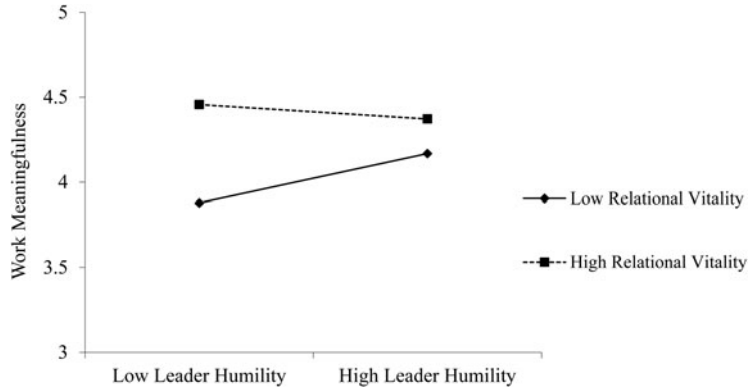


Fig. 2. Interaction plot for the moderator effect of relational vitality.

encounter much meaningfulness in their work. When followers find their work meaningful, the quality of the leader–follower relationship is less important.

This finding adds a contextual layer to relationship-oriented theories of leadership, as it suggests that some leaders inspire followers through their symbolic self-transcendent behaviors to find meaning in their work and also enact self-transcendent behaviors that promote the common good. In this case, the quality of the relationship the follower possesses with the leader may be less important; in fact, in some cases, the follower may have no relationship with the leader whatsoever (i.e., in large organizations where a few layers of management stand in between the follower and the humble leader). Future research might examine other contextual situations in which the leader–follower relationship is attenuated in importance as a motivator of positive follower outcomes due to symbolic leader behaviors that inspire followers without any (or limited) direct interaction.

A practical implication of this study is that, in order to foster followers who are inclined to help others in the organization and be strong ‘team players,’ organizational leaders might focus their energies on either: (a) enacting symbolic self-transcendent behaviors that help followers draw a stronger sense of meaning from their work; or (b) develop high-quality relationships with followers. When an organization’s day-to-day work is challenging to draw meaning from (e.g., packing boxes in a warehouse), leaders can compensate for the lack of meaning making by investing in their relationships with followers. Given that leaders have limited personal resources to invest in their roles (Hobfoll, 1989) and conflicting demands placed upon their time every day (Smith et al., 2012), our study suggests that they can choose either to help followers create meaning in their work or to develop high-quality relationships with their followers, and that either of these pathways can lead to more helpful followers who care more about the welfare of their team members.

Limitations and future research

Though our study has some definite strengths, such as a sample representing a broad array of organizations and time-lagged design, it also has some limitations that should be considered when interpreting the results of our research.

First, single-source data may suffer from inflated correlations due to common method variance. Though we tried to minimize this threat by employing commonly recommended strategies (e.g., random ordering of questions, assuring anonymity, time-lagged design, and performing a Harman’s single-factor test), future research should replicate our study relationships using multi-source data.

Second, our sample was collected from India which is more of a collectivistic society; thus, whether our findings can generalize to individualistic societies requires further exploration. In spite of this limitation, Rego et al. (2019) contain a cross-cultural comparison study between

organizations in different countries. The paper showed equivalence of findings which supports the inference that our findings may generalize to other cultures as well. To test the generalizability of our findings, we encourage future research to replicate our findings in individualistic cultures.

Third, it would be better to include a measure of social desirability and partial out its effect in our models in order to account for the impact of impression management because the nature of the topics explored in our study might encourage such a tendency in subjects. For example, participants may tend to over-report their prosocial motivations. Hence, we encourage future research to consider partialling out the effect of social desirability in leader humility research, especially when the topics under the investigation may encourage such a tendency.

Fourth, we encourage future research to consider including more control variables in order to further increase the rigor of model testing. For example, future research may consider including additional control variables, such as individuals' work experiences, individuals' work backgrounds, numbers of people managed, manager status, professional experiences, and other work-related characteristics. In spite of this limitation, we still followed the recommendation from prior leadership research (e.g., Frieder, Wang, & Oh, 2018) when considering the inclusion of specific control variables in our study.

Fifth, our outcome variable is attitudinal rather than behavioral. We infer, based on a large volume of existing research, that prosocial motivation will foster ethical behavior in employees, but we did not directly test this effect. We recommend future research to directly test whether leader humility influences employee ethical behavior through the mechanism of employee prosocial motivation. We also recommend that future research examines the behavioral outcomes of the processes we explored. It would be worthwhile to examine to what degree prosocial motivation mediates the impact of leader humility, relational vitality, and meaningfulness on workplace behaviors such as increasing expressions of organizational citizenship and reducing deviant, counterproductive, or abusive behaviors. It would also be meaningful to see if these effects replicated in other cultural contexts, such as organizations in the West.

Sixth, the present study utilized subordinate ratings of relational vitality; nevertheless, leaders and followers may have different perceptions of relational vitality, meaning that followers may underestimate or overestimate their perceptions of relational vitality with supervisors (Cogliser, Schriesheim, Scandura, & Gardner, 2009). Such a perceptual difference may impact the relationships among constructs. Future study might build on the congruence/balance model of leader–follower relationships (Cogliser *et al.*, 2009) and use both follower and leader ratings of relational vitality to assess how the relationships among constructs vary as a function of different rating sources.

Conclusion

Leaders have a significant influence in shaping the kind of motivation followers embrace as they approach their work. Prosocial motivation is a core mechanism that contributes to many positive outcomes in organizations. It is our hope that this study will pave the way for further research into the effects of self-transcendent leader behaviors such as leader humility on follower self-transcendent behaviors that promote the collective good. Leaders are only as effective as the followers they marshal to work toward common objectives (Judge, Bono, Ilies, & Gerhardt, 2002; Yukl, 2010). A deeper understanding of how leaders enable followers to think beyond themselves for the benefit of the larger group and society stands to usher us toward a better world.

References

- Avolio, B., & Mhatre, K. (2012). Advances in theory and research on authentic leadership. In G. M. Spreitzer & K. S. Cameron (Eds.), *The Oxford handbook of positive organizational scholarship* (pp. 773–783). Oxford, England: Oxford University Press.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York, NY: Free Press.

- Baumeister, R. F., & Landau, M. J. (2018). Finding the meaning of meaning: Emerging insights on four grand questions. *Review of General Psychology*, 22(1), 1–10.
- Berdyayev, N. (2018). Nikolai Berdyayev Quotes. Retrieved from https://www.brainyquote.com/quotes/nikolai_berdyayev_392238
- Bharanitharan, K., Chen, Z. X., Bahmannia, S., & Lowe, K. B. (2018). Is leader humility a friend or foe, or both? An attachment theory lens on leader humility and its contradictory outcomes. *Journal of Business Ethics*, 1–15.
- Blau, P. M. (1964). *Exchange and power in social life*. New York: Routledge.
- Brief, A. P., & Weiss, H. M. (2002). Organizational behavior: Affect in the workplace. *Annual Review of Psychology*, 53, 279–307.
- Cameron, K. S., & Caza, A. (2003). Contributions to the discipline of positive organizational scholarship. *American Behavioral Scientist*, 47(6), 1–17.
- Chaplin, W. F., John, O. P., & Goldberg, L. R. (1988). Conceptions of states and traits: Dimensional attributes with ideals as prototypes. *Journal of Personality and Social Psychology*, 54(4), 541–557.
- Chiaburu, D. S., Smith, T. A., Wang, J., & Zimmerman, R. D. (2014). Relative importance of leader influences for subordinates' proactive behaviors, prosocial behaviors, and task performance: A meta-analysis. *Journal of Personnel Psychology*, 13(2), 70–86.
- Chiu, C. Y. C., Owens, B. P., & 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(12), 1705–1720.
- Cogliser, C. C., Schriesheim, C. A., Scandura, T. A., & Gardner, W. L. (2009). Balance in leader and follower perceptions of leader–member exchange: Relationships with performance and work attitudes. *Leadership Quarterly*, 20(3), 452–465.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Colbert, A. E., Bono, J. E., & Purvanova, R. K. (2016). Flourishing via workplace relationships: Moving beyond instrumental support. *Academy of Management Journal*, 59, 1199–1223.
- Collins, J., & Porras, J. (1994). *Built to last: Successful habits of visionary companies*. New York: Random House.
- De Cremer, D., Mayer, D. M., van Dijke, M., Schouten, B. C., & Bards, M. (2009). When does self-sacrificial leadership motivate prosocial behavior? It depends on followers' prevention focus. *Journal of Applied Psychology*, 94(4), 887–899.
- Dutton, J., & Heaphy, E. (2003). The power of high-quality connections. In K. S. Cameron & J. E. Dutton (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (3rd ed., pp. 263–278). Oakland, CA: Berrett-Koehler Publishers.
- Fletcher, L., & Schofield, K. (2019). Facilitating meaningfulness in the workplace: A field intervention study. *The International Journal of Human Resource Management*, 1–29.
- Frieder, R. E., Wang, G., & Oh, I. S. (2018). Linking job-relevant personality traits, transformational leadership, and job performance via perceived meaningfulness at work: A moderated mediation model. *Journal of Applied Psychology*, 103, 324–333.
- Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., & Walumbwa, F. (2005). 'Can you see the real me?' A self-based model of authentic leader and follower development. *The Leadership Quarterly*, 16(3), 343–372.
- Graen, G., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6(2), 219–247.
- Grant, A. (2007). Relational job design and the motivation to make a prosocial difference. *Academy of Management Review*, 32(2), 393–417.
- Grant, A. (2008). Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity. *Journal of Applied Psychology*, 93(1), 48–58.
- Grant, A. M., & Campbell, E. M. (2007). Doing good, doing harm, being well and burning out: The interactions of perceived prosocial and antisocial impact in service work. *Journal of Occupational and Organizational Psychology*, 80(4), 665–691.
- Greenbaum, R. L., Mawritz, M. B., & Piccolo, R. F. (2015). When leaders fail to 'walk the talk': Supervisor undermining and perceptions of leader hypocrisy. *Journal of Management*, 41, 929–956.
- Greenleaf, R. K. (1977). *Servant leadership: A journey into the nature of legitimate power and greatness*. Mahwah, NJ: Paulist Press.
- Harms, P. D., & Crede, M. (2010). Emotional intelligence and transformational and transactional leadership: A meta-analysis. *Journal of Leadership & Organizational Studies*, 17, 5–17.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: The Guilford Press.
- Hayes, A. F. (2018). Partial, conditional, and moderated moderated mediation: Quantification, inference, and interpretation. *Communication Monographs*, 85, 4–40.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *The American Psychologist*, 44(3), 513–524.
- Hofstede, G. (1997). *Cultures and organizations: Software of the mind. Intercultural cooperation and its importance for survival*. New York: McGraw-Hill.
- Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind*. New York, NY: McGraw-Hill.
- Hu, J., Erdogan, B., Jiang, K., Bauer, T. N., & Liu, S. (2018). Leader humility and team creativity: The role of team information sharing, psychological safety, and power distance. *Journal of Applied Psychology*, 103(3), 313–323.

- Ilies, R., Nahrgang, J., & Morgeson, F. P. (2007). Leader-member exchange and citizenship behaviors: A meta-analysis. *Journal of Applied Psychology, 92*, 269–277.
- Johnson, S. K. (2008). I second that emotion: Effects of emotional contagion and affect at work on leader and follower outcomes. *The Leadership Quarterly, 19*(1), 1–19.
- Johnson, R. E., Rosen, C. C., & Djurdjevic, E. (2011). Assessing the impact of common method variance on higher order multidimensional constructs. *Journal of Applied Psychology, 96*, 744–761.
- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology, 87*(4), 765–780.
- Keltner, D., Gruenfeld, D., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review, 110*(2), 265–284.
- Lee, A., Lyubovnikova, J., Tian, A. W., & Knight, C. (2019). Servant leadership: A meta-analytic examination of incremental contribution, moderation, and mediation. *Journal of Occupational and Organizational Psychology, 93*(1), 1–44.
- Maslyn, J. M., & Uhl-Bien, M. (2001). Leader-member exchange and its dimensions: Effects of self-effort and other's effort on relationship quality. *Journal of Applied Psychology, 86*(4), 697–708.
- McNeely, B. L., & Meglino, B. M. (1994). The role of dispositional and situational antecedents in prosocial organizational behavior: An examination of the intended beneficiaries of prosocial behavior. *Journal of Applied Psychology, 79*(6), 836–844.
- Menges, J. I., Walter, F., Vogel, B., & Bruch, H. (2011). Transformational leadership climate: Performance linkages, mechanisms, and boundary conditions at the organizational level. *Leadership Quarterly, 22*(5), 893–909.
- Michie, S. (2009). Pride and gratitude: How positive emotions influence the prosocial behaviors of organizational leaders. *Journal of Leadership & Organizational Studies, 15*(4), 393–403.
- Morgeson, F., DeRue, D., & Karam, E. (2010). Leadership in teams: A functional approach to understanding leadership structure and processes. *Journal of Management, 36*, 5–39.
- Ng, K. Y., Ang, S., & Chan, K. Y. (2008). Personality and leader effectiveness: A moderated mediation model of leadership self-efficacy, job demands, and job autonomy. *Journal of Applied Psychology, 93*(4), 733–743.
- Oc, B., Bashshur, M. R., Daniels, M. A., Greguras, G. J., & Diefendorff, J. M. (2015). Leader humility in Singapore. *Leadership Quarterly, 26*(1), 68–80.
- Ou, A. Y., Tsui, A. S., Kinicki, A. J., Waldman, D. A., Xiao, Z., & Song, L. J. (2014). Humble chief executive officers' connections to top management team integration and middle managers' responses. *Administrative Science Quarterly, 59*(1), 34–72.
- Ou, A. Y., Waldman, D. A., & Peterson, S. J. (2018). Do humble CEOs matter? An examination of CEO humility and firm outcomes. *Journal of Management, 44*(3), 1147–1173.
- Owens, B. P., Baker, W. E., Sumpter, D. M., & Cameron, K. S. (2016). Relational energy at work: Implications for job engagement and job performance. *Journal of Applied Psychology, 101*(1), 35–49.
- Owens, B., & Hekman, D. (2012). Modeling how to grow: An inductive examination of humble leader behaviors, contingencies, and outcomes. *Academy of Management Journal, 55*(4), 787–818.
- Owens, B. P., & 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*(3), 1088–1111.
- Owens, B. P., Johnson, M. D., & Mitchell, T. R. (2013). Expressed humility in organizations: Implications for performance, teams, and leadership. *Organization Science, 24*(5), 1517–1538.
- Owens, B. P., Walker, A. S., & Waldman, D. A. (2015). Leader narcissism and follower outcomes: The counterbalancing effect of leader humility. *Journal of Applied Psychology, 100*(4), 1–11.
- Owens, B. P., Yam, K. C., Bednar, J. S., Mao, J., & Hart, D. W. (2019). The impact of leader moral humility on follower moral self-efficacy and behavior. *Journal of Applied Psychology, 104*(1), 146–163.
- Paustian-Underdahl, S. C., Shanock, L. R., Rogelberg, S. G., Scott, C. W., Justice, L., & Altman, D. G. (2013). Antecedents to supportive supervision: An examination of biographical data. *Journal of Occupational and Organizational Psychology, 86*(3), 288–309.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *The Journal of Applied Psychology, 88*(5), 879–903.
- Porter, T., & Schumann, K. (2018). Intellectual humility and openness to the opposing view. *Self and Identity, 17*(2), 139–162.
- Pratt, M. G., & Ashforth, B. E. (2003). Fostering meaningfulness in working and at work. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (pp. 309–327). San Francisco, CA: Berrett-Koehler Publishers.
- Qin, X., Chen, C., Yam, K. C., Huang, M., & Ju, D. (2020). The double-edged sword of leader humility: Investigating when and why leader humility promotes versus inhibits subordinate deviance. *Journal of Applied Psychology, 105*(7), 693–712.
- Rego, A., Cunha, M. P. E., & Simpson, A. V. (2018). The perceived impact of leaders' humility on team effectiveness: An empirical study. *Journal of Business Ethics, 148*(1), 205–218.
- Rego, A., Owens, B., Leal, S., Melo, A. I., Cunha, M. P. E., Goncalves, L., & Ribeiro, P. (2017). How leader humility helps teams to be humbler, psychologically stronger, and more effective: A moderated mediation model. *Leadership Quarterly, 28*(5), 639–658.
- Rego, A., Owens, B., Yam, K. C., Bluhm, D., Cunha, M. P. E., Silard, A., ... Liu, W. (2019). Leader humility and team performance: Exploring the mediating mechanisms of team PsyCap and task allocation effectiveness. *Journal of Management, 45*(3), 1009–1033.

- Robertson, J., & Barling, J. (2013). Greening organizations through leaders' influence on employees' pro-environmental behaviors. *Journal of Organizational Behavior*, 34, 176–194.
- Salancik, G. R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly*, 23(2), 224–253.
- Schaubroeck, J. M., Hannah, S. T., Avolio, B. J., Kozlowski, S. W., Lord, R. G., Treviño, L. K., ... Peng, A. C. (2012). Embedding ethical leadership within and across organization levels. *Academy of Management Journal*, 55(5), 1053–1078.
- Smith, W. K., Besharov, M. L., Wessels, A. K., & Chertok, M. (2012). A paradoxical leadership model for social entrepreneurs: Challenges, leadership skills, and pedagogical tools for managing social and commercial demands. *Academy of Management Learning & Education*, 11(3), 463–478.
- Spector, B. (2014). Flawed from the 'Get-Go': Lee Iacocca and the origins of transformational leadership. *Leadership*, 10(3), 361–379.
- Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement and validation. *Academy of Management Journal*, 38(5), 1442–1465.
- Sy, T., Côté, S., & Saavedra, R. (2005). The contagious leader: Impact of the leader's mood on the mood of group members, group affective tone, and group processes. *The Journal of Applied Psychology*, 90(2), 295–305.
- Tangney, J. (2009). Humility. In S. Lopez & C. Synder (Eds.), *Handbook of positive psychology* (pp. 483–490). New York: Oxford University Press.
- Vinarski-Peretz, H., Binyamin, G., & Carmeli, A. (2011). Subjective relational experiences and employee innovative behaviors in the workplace. *Journal of Vocational Behavior*, 78(2), 290–304.
- Wang, L., Owens, B. P., Li, J. J., & Shi, L. (2018). Exploring the affective impact, boundary conditions, and antecedents of leader humility. *Journal of Applied Psychology*, 103(9), 1019–1038.
- Waterman, A. S. (1984). *The psychology of individualism*. New York: Praeger.
- Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of Management Review*, 14(3), 361–384.
- Wright, B. E., Christensen, R. K., & Pandey, S. K. (2013). Measuring public service motivation: Exploring the equivalence of existing global measures. *International Public Management Journal*, 16(2), 197–223.
- Yukl, G. (2010). *Leadership in organizations* (7th ed.). Upper Saddle River, NJ: Prentice-Hall.
- Yukl, G. (2012). Effective leadership behavior: What we know and what questions need more attention. *Academy of Management Perspectives*, 26(4), 66–85.