
The influence of Leaders' Moral Courage and followers' perceptions of Humble Leadership on Group-Level Behavior: A Moderated-Mediation Model


Mohamed Ahmed Ali Nembr¹ Assistant Professor, Business department, Faculty of commerce, Sohag university, Sohag, Egypt
Email: mohamed.namr@commerce.sohag.edu.eg


Tarek Mohamed Ali² Associate professor, Business department, Faculty of commerce, Sohag university, Sohag, Egypt.
Business department British University in Egypt, faculty of Business, Economics and political science.
Email: tarek.ali@bue.edu.eg

Abstract: This study aims to investigate the impact of “leaders' moral courage” and the “cynicism climate” on followers' perceptions of “humble leadership” and their subsequent influence on group-level behaviors, particularly "group cooperation," "group sanctioning," and "group social undermining." A cross-sectional survey was conducted to collect data from 607 academic staff across 153 teams at upper Egypt public universities. A moderated-mediation model was developed to design the hypothesized framework, which was analyzed using the SPSS v.23, AMOS v.23, and Mplus v.7.3.

Results reveal a positive correlation between leaders' moral courage and perceived humble leadership, moderated by the cynicism climate. Perceived humble leadership is positively correlated with group cooperation and negatively linked to both group sanctioning and group social undermining. This study integrates basic principles of “signaling theory” and “attribution theory” to bridge existing research gap. It provides novel insights into how followers' perceptions of humble leadership influence group behaviors, emphasizing the roles of leader moral courage and cynicism climate in shaping these perceptions. This study helps leaders in public universities better understand how academic staff perceives humble leadership and provides insights into the mechanisms shaping these perceptions to better manage their behaviors.

Keywords: Leader moral courage; Humble Leadership; Cynicism Climate; Group Cooperation; Group Sanctioning; Group Social Undermining; Attribution Theory; Signaling Theory.

¹  0000-0001-5265-9753

²  0000-0003-3292-7460

Introduction

The concept of humble leadership has attracted significant attention from both scholars and practitioners (Ding, Yu, Chu, Li, & Amin, 2020). Leader humility is an interpersonal trait defined by (a) the ability to perceive oneself accurately, (b) a recognition of others' strengths and contributions, and (c) a willingness to learn and accept new ideas and feedback (Owens, Johnson, & Mitchell, 2013). Humble leaders are often described as supportive, relationship-oriented, and focused on fostering collaboration (Vera & Rodriguez-Lopez, 2004), prompting scholars to investigate how their behaviors influence others. Research indicates that leaders who demonstrate humility in their work environments often achieve outcomes highly valued by their peers (Cable, 2018). Conversely, leaders exhibiting arrogance, overconfidence, or narcissism may steer their organizations toward potential failure (Kelemen, Matthews, Matthews, & Henry, 2023). A growing body of literature has explored the effects of humility on leadership dynamics (Morris et al., 2005), subordinate behavior (Bharanitharan, Lowe, Bahmannia, Chen, & Cui, 2021), group dynamics in leadership contexts (Owens & Heckman, 2016), and organizational outcomes (Petrenko, Aime, Recendes, & Chandler, 2019). Despite the increasing recognition of humble leadership's significance, several critical challenges persist, impacting both theoretical frameworks and practical applications (Chughtai & Arifeen, 2023).

Firstly, previous studies investigating the outcomes associated with humble leadership have demonstrated that humble leader fosters trust among followers (Bharanitharan et al., 2021; Nguyen, Teo, Halvorsen, & Staples, 2020), promotes organizational citizenship behaviors (Qin, Liu, Brown, Zheng, & Owens, 2021), and enhances follower creativity (Wang, Liu, & Zhu, 2018). Moreover, humble leadership has been negatively linked to passive behaviors such as withdrawal (Qian, Zhang, & Jiang, 2020) and turnover (Owens et al., 2013). However, a significant gap remains in understanding why certain leaders exhibit humble behaviors and why followers perceive some leaders as humble while failing to attribute the same characteristics to others. This gap limits our understanding of the antecedents to humble leadership (Morris, Brotheridge, & Urbanski, 2005; Kelemen et al., 2023). Research on the antecedents of humble leadership has primarily focused on factors influencing followers' perceptions, emphasizing that leaders' characteristics and workplace behaviors are critical precursors to shaping followers' perceptions of humble leadership (Morris et al., 2005; Kelemen et al., 2023). From this perspective, Sekerka, Bagozzi, & Charnigo (2009) have defined Moral Courage as a complex array of ethical competencies that enable leaders to uphold moral principles and act in alignment with their

convictions, even when faced with adversity. Leaders who exhibit moral courage integrate ethical values into managerial decisions, resulting in long-term organizational benefits (Comer & Vega, 2011; Hannah & Avolio, 2010; Kidder, 2005; Simola, 2018). The presence of moral courage among leaders enhances followers' sense of security and confidence, making it a critical factor in shaping perceptions of humble leadership and warranting further investigation (Chughtai & Arifeen, 2023). Moral courage also serves as a signaling mechanism, allowing group members to identify their leaders as ethical role models (Treviño, Hartman, & Brown, 2000). However, cynicism climate—defined by a pervasive belief that the organization lacks integrity and authenticity—can hinder followers' recognition of moral courage (Hewett, Shantz, & Mundy, 2019). This perception, shaped by employees' broader impressions, influences their expectations of HR practices and undermines initiatives aimed at cultivating humble leadership (Dean, Brandes, & Dharwadkar, 1998).

Secondly, the majority of the literature addressing humble leadership has predominantly focused on an individual-level perspective (Zhou & Wu, 2018; Wang et al., 2018), however, there is a noticeable gap in the literature regarding the exploration of humble leadership at the group level (Chandler, Johnson, Jordan, & Short, 2023; Li, Wei, Chen, & Yan, 2020; Ou, Tsui, Kinicki, Waldman, Xiao, & Song (2014). In this context, Li et al. (2020), along with Ou et al. (2014), demonstrated that the implementation of humble leadership in organizational contexts prioritizes fostering a positive and successful climate within groups. Similarly, Chandler et al. (2023) highlight the need for future research to explore the antecedents and consequences of humble leadership at the group level. While existing studies have examined the relationship between humble leadership and group outcomes, focusing on areas such as group learning, creativity, effectiveness, and psychological safety (Chen, Feng, Liu, & Yao, 2021; Li et al., 2020; Ou et al., 2014), there remains a notable gap in understanding its correlation with other group behaviors, including group cooperation, group sanctioning, and group social undermining (Varella, Javidan, & Waldman, 2012). Therefore, this study contributes to the humble leadership literature by exploring how followers' perceptions of humble leadership affect group behaviors, particularly group cooperation, group sanctioning, and group social undermining.

Thirdly, this study contributes to the growing body of knowledge by applying both signaling theory (Spence, 1978) and attribution theory (Kelley & Michela, 1980) to humble leadership, addressing an area of research that has been previously underexplored. From this perspective, this study seeks to deepen understanding of how individuals perceive and evaluate humble leadership through leaders' ethical signals, using signaling theory framework for analyzing

humble leadership behaviors (Connelly, Certo, Ireland, & Reutzel, 2011; Spence, 1978). Additionally, this study integrates attribution theory (Kelley & Michela, 1980) with signaling theory, in response to calls for adopting an attribution perspective in organizational sciences (Harvey, Madison, Martinko, Crook, & Crook, 2014). While research on attributions in human resources remains limited (Hewett et al., 2019), this approach offers fresh insights into humble leadership. Integrating signaling and attribution theories into a theoretical framework provides a comprehensive lens to understand how leaders communicate their intentions and values through their behaviors, which followers interpret and evaluate within their contextual experiences. Through the application of signaling theory, the framework underscores the role of leaders' moral courage as a critical signal that positively shapes followers' perceptions of humble leadership. Simultaneously, attribution theory sheds light on how followers assign meaning to these signals, influenced by their workplace environment, such as a climate of cynicism or support (see Figure 1). This dual-theoretical approach enhances our understanding of the intricate interplay between leader behaviors and follower perceptions, emphasizing the role of group dynamics in shaping responses to leadership. Based on the above discussion, this study addresses the central question: "How do a leader's moral courage and the climate of cynicism influence followers' perceptions of humble leadership, and how do these perceptions impact group cooperation, group sanctioning, and group social undermining?"

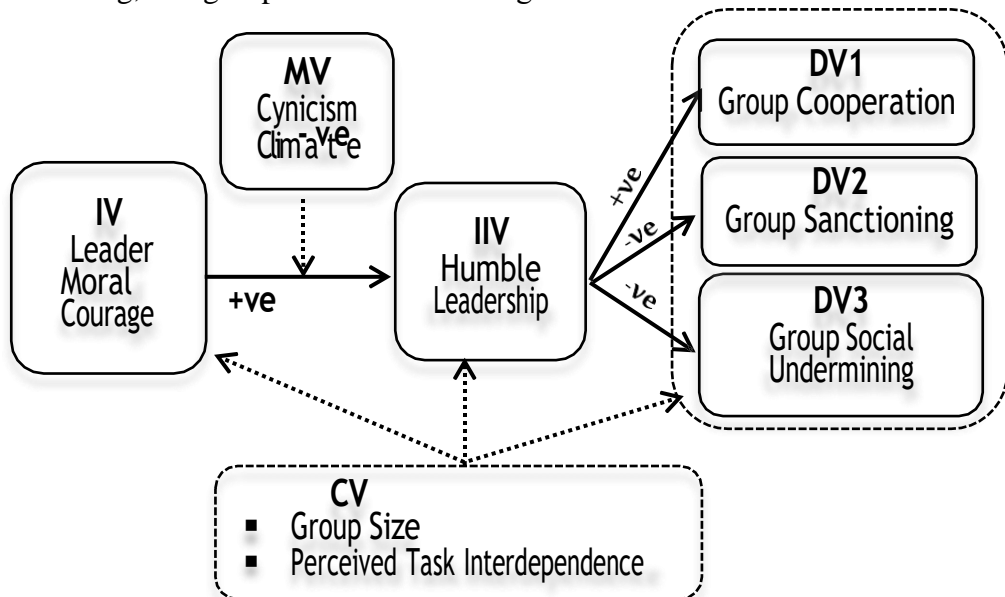


Figure. 1. Hypothesized Model

Source: developed by authors

Theoretical Background And Hypothesis Development

Leader moral courage and Perceived Humble Leadership

Kelemen et al. (2023) demonstrated that research on the antecedents of humble leadership remains relatively limited compared to the well-established understanding of its outcomes. In this context, Chughtai & Arifeen (2023) demonstrate that moral courage influences how followers perceive humble leadership, as it enables leaders to actualize their intentions by demonstrating and advocating humility in the workplace. Comer and Sekerka (2018) emphasized that moral courage is a fundamental component of ethical behavior, representing an individual's moral standards within their personal ethical framework. It empowers leaders to transform their internally held, value-based moral intentions into ethical actions. Research indicates that in situations of moral ambiguity, where conflicting interests and principles converge, organizational leaders significantly benefit from possessing moral courage and consistently demonstrating ethically courageous behavior (Comer & Vega, 2011; Comer & Sekerka, 2018). Thus, acts of moral courage are not only observed, processed, and internalized by followers but also lead them to infer the underlying principles and characteristics that shape a leader's behavior (Craig & Gustafson, 1998).

Acting with moral courage is likely to signal a leader's underlying values and virtues to followers. Building on this perspective, this study focuses on the characteristics and behaviors of individuals as signals. According to signaling theory (Spence, 1978), for signals to be effective and influential on followers, they must possess specific characteristics. A crucial aspect related to humble leadership is that the signals sent by the leader must be costly, meaning they should not yield personal benefit to the leader. These signals help followers mitigate risks, while the leader assumes significant risks, particularly when confronting superiors. Moral courage is considered a costly signal because an ethically minded leader who communicates with superiors highlights organizational violations and errors (Comer & Sekerka, 2018). This behavior carries potential costs for the leader; however, from the followers' perspective, such a leader is perceived as ethical, selfless, and willing to bear burdens and risks. Therefore, based on signaling theory, this study posits that followers will interpret these actions as ethical signals. Consequently, a positive relationship between a leader's moral courage and followers' perception of humble leadership is hypothesized.

Otherwise, attribution theory of Kelley & Michela (1980) stressed that individuals naturally seek to understand the motivations behind others' actions. In the context of humble leadership, when followers interpret ethical cues from their leaders—based on internal factors such as their knowledge of the leader's

character—they are more likely to recognize humility in leadership. Attribution theory suggests a positive correlation between a leader's moral courage and followers' perception of humble leadership. Leaders who demonstrate moral agency and actively address ethical dilemmas make their moral actions socially salient to followers (Treviño et al., 2000). Consequently, leaders who exhibit moral courage are more likely to be perceived as humble by their followers. Therefore, the following hypothesis is proposed:

H1: Leader moral courage is positively related to followers' perceived humble leadership

Perceived humble Leadership, Group Cooperation, Group Sanctioning and Group Social undermining.

Leadership plays a pivotal role in shaping group dynamics (Varella et al., 2012), underscoring its importance for group success (Kozlowski & Ilgen, 2006). In this context, Zaccaro, Rittman, & Marks (2001, p. 452) assert that "effective leadership processes are arguably the most crucial factor in achieving organizational group success". Furthermore, Kozlowski and Ilgen (2006, p. 107) describe leadership as a "promising point of influence for enhancing group effectiveness". Additionally, Varella et al. (2012) highlight that socially charismatic leadership enhances group dynamics, leading to improved workplace outcomes. So far however, research on the relationship between leadership and group outcomes or behaviors in the workplace is notably limited, particularly when compared to studies focusing on individual behaviors (Bommer, Dierdorff, & Rubin, 2007).

Swain (2018) demonstrated that humble leadership enhances group performance through the facilitation of information flow. Moreover, Rego, Owens, Leal, Melo, Cunha, Gonçalves, & Ribeiro (2017) and Rego & Simpson (2018) formulated and tested a model illustrating how humble leadership at the departmental level permeates and enhances group effectiveness through group humility, group psychological capital, and balanced processing behaviors. Additionally, Chiu, Balkundi, Owens, & Tesluk (2022) confirmed that humble leadership contributes to the elevation and augmentation of group viability. Studies (e.g., Peng, Wang, Schaubroeck, & Gao, 2020; Liu, Lucy Liu, Wang, & Wang, 2022; Rego, Owens, Yam, Bluhm, Cunha, Silard, Goncalves, Martins, Simpson, & Liu, 2019; Gonçalves & Brandão (2017), Chen, Liu, Wang, & Hu, 2021; Hu, Erdogan, Jiang, Bauer, & Liu, 2018; Li, Zhang, Xia, & Liu, 2019) affirmed the positive relationship between humble leadership and group performance as well as group creativity. Consistent with the research by Craig and Gustafson (1998), positive follower responses include perceptions of the leader's selflessness, along with feelings of confidence and trust in the leader (Gottlieb & Sanzgiri, 1996). Thus, the values and ethics demonstrated by a leader play a significant role in shaping group behavior.

This study employs two key theoretical perspectives—signaling theory (Spence, 1978) and attribution theory (Kelley & Michela, 1980)—to explain how and why humble leadership contributes to group performance outcomes. Signaling theory posits that when leaders demonstrate ethical conduct and communicate ethical values, they send clear signals to followers about the importance of ethical behavior. Followers interpret these signals, which shapes their perception of humble leadership, ultimately influencing group behaviors. As a result, they are likely to adopt these values, fostering a positive ethical atmosphere within the group and encouraging cooperative behaviors. Attribution theory (Kelley & Michela, 1980) provides a framework for understanding how individuals perceive and interpret others' actions, particularly in social contexts. It suggests that people instinctively seek to assign reasons for observed behaviors, whether attributing them to internal traits or intentions or to external situational factors. Humble leadership is particularly effective in promoting group cooperation through internal attributions. When leaders exemplify humility by admitting mistakes, soliciting feedback, and valuing others' contributions, group members are inclined to attribute positive motives to them (Cable, 2018). They may view the leader as genuinely concerned for the group's well-being and success, thereby fostering trust and cooperation among members. Furthermore, humble leaders are more likely to create a sense of psychological safety within the group, encouraging members to express their ideas and collaborate toward shared objectives. Based on previous discussion, the following hypothesis is proposed:

H2: Followers' perceived humble leadership is positively related to group cooperation

Humble leadership highlights positive aspects, such as acknowledging mistakes, seeking feedback, and appreciating others' contributions, whereas sanctioning behaviors involve excluding non-compliant members and withholding support (Portes, 1998). Thus, humble leader perceives sanctioning as undesirable due to its negative implications. By applying signaling theory (Spence, 1978) and attribution theory (Kelley & Michela, 1980), we understand how ethical signals and positive attributions shape group dynamics and foster mutual trust. Humble leadership emphasizes modeling ethical behaviors rather than relying on punitive actions, thereby reducing the need for sanctions. For example, humble leaders prioritize the group's interests, honor commitments, and share information (Podsakoff, Ahearne, & MacKenzie, 1997). This approach not only shapes group behavior but also diminishes self-interest, further lessening the necessity for punitive measures. Thus, humble leadership operates with a distinct focus, contrasting with traditional sanctioning and control methods. Therefore, the following hypothesis is proposed:

H3: Followers' perception of humble leadership is negatively related to group sanctioning

Nevertheless, humble leadership has the potential to alleviate group social undermining by promoting internal attributions. Applying signaling theory (Spence, 1978) and attribution theory (Kelley & Michela, 1980), ethical signals from leaders and positive attributions by followers can significantly impact group dynamics, reducing social undermining. The perception of humble leadership is crucial in shaping a positive organizational climate characterized by trust, fairness, and respect among group members. Leaders perceived as humble act as role models, influencing group norms and behaviors, which deters social undermining (Hu et al., 2018). When leaders are viewed as humble, group members are more likely to collaborate effectively. Based on this, the following hypothesis is proposed:

H4: Followers' perception of humble leadership is negatively related to group social undermining

The Mediating role of followers' perception of humble leadership in the relationship between Leader moral courage and (Group cooperation, sanctioning & Social Undermining)

Attribution theory of Kelley & Michela (1980) suggests that individuals interpret events by attributing them to specific causes. From this perspective, followers perceive a leader who demonstrates moral courage as having strong ethical intentions (Koerner, 2014; Sekerka et al., 2009). This positive attribution can enhance followers' perceptions of the leader's values and principles, reinforcing the intrinsic value of group members' contributions. According to the principles of attribution theory, such positive attributions are likely to encourage group cooperation. In other words, individuals become more motivated to collaborate, actively contribute to shared goals, and exceed their formal responsibilities to strengthen the group (Gong, Chang, & Cheung, 2010).

Nevertheless, signaling theory of Connelly et al. (2011) and Spence (1978) posits that when followers interpret a leader's signals as ethical, they are more likely to adopt ethical behaviors themselves. However, it is crucial to recognize that there are factors beyond the leader's signals that can also influence followers' responses (Banks, Fischer, Gooty, & Stock, 2021). The ethical behaviors demonstrated by followers can significantly affect group or organizational dynamics, especially when these behaviors align with the prevailing group and organizational culture, thereby enhancing overall group performance. Attribution theory further elucidates the connection between a leader's moral courage, group sanctioning, and social undermining. When followers perceive a leader's actions as morally courageous, it positively influences their attributions regarding the leader's intentions. In such cases, followers are likely to attribute positive ethical intentions to the leader's choices and actions (Shin, 2012). This positive attribution can discourage negative interpretations, reducing the likelihood of viewing the leader's actions as harmful

or unjust. Consequently, the perception of a leader's moral courage may lead to a decrease in group sanctioning and social undermining within the group. Based on this, the following hypotheses are proposed:

H5: Followers' perception of humble leadership mediates the relationship between leader moral courage and group Cooperation.

H6: Followers' perception of humble leadership mediates the relationship between leader moral courage and group sanctioning.

H7: Followers' perception of humble leadership mediates the relationship between leader moral courage and group social undermining.

2.4 | Cynicism Climate as a moderator of the effect of Leader moral courage

Organizational cynicism, a widespread global phenomenon, arises from employees' negative attitudes toward their employer (Jiang, Hu, Wang, & Jiang, 2019). It is characterized as a pessimistic outlook, perceptions of organizational dishonesty, negative emotional reactions, and critical behaviors toward the organization (Dean et al., 1998, p. 345). This study emphasizes the cynicism climate, a specific dimension of organizational cynicism characterized by skepticism, distrust, and negative beliefs about the organization (Brown, Cregan, Kulik, & Metz, 2022).

Drawing on attribution theory (Kelley & Michela, 1980), this study examines the interplay among leader moral courage, the cynicism climate, and humble leadership. Attribution theory explains how employees interpret leaders' actions, attributing them to either personal characteristics or external circumstances. In highly cynical environments, employees may perceive a leader's moral courage as externally driven rather than a reflection of intrinsic ethical values, leading to skepticism and mistrust (Hewett et al., 2019). This misinterpretation of ethical leadership signals in a cynical climate can diminish perceptions of humble leadership. Furthermore, employees with entrenched negative beliefs are likely to question the authenticity of morally courageous actions, reinforcing a culture of cynicism (Dean et al., 1998). Based on this discussion, the following hypothesis is proposed:

H8: Cynicism climate moderates the positive relationship between leader moral courage and followers' perception of humble leadership so that the relation is weaker (Vs. Stronger) at high (Vs. Low) levels of cynicism.

Moderator Mediation

Previous discussions have underscored the potential for increased cynicism among followers to diminish their openness to leader signals, thereby reducing the overall influence of humble leadership on group behaviors. This scenario suggests the emergence of a conditional indirect effect, wherein the mediated relationship depends on the level of the moderator—in this case, the

cynicism climate (Preacher, Rucker, & Hayes, 2007). Expanding upon these notions, we anticipate that a cynicism climate will impede followers' ability to grasp and assess positive signals from leaders, thus obstructing their perception of humble leadership. Consequently, this obstruction in perceiving humble leadership is likely to hamper the positive (or negative) indirect effects of leader moral courage on group behaviors. Essentially, this study hypothesis posits that the cynicism climate will attenuate the mediated impact of leader moral courage on group behaviors through the prism of perceived humble leadership. Thus, the following hypotheses are proposed:

H9: Cynicism climate moderates the indirect relation between leader moral courage and group cooperation through followers' perception of humble leadership so that the relation is weaker (Vs. Stronger) at high (Vs. Low) levels of cynicism.

H10: Cynicism climate moderates the indirect relation between leader moral courage and group sanctioning through followers' perception of humble leadership so that the relation is weaker (Vs. Stronger) at high (Vs. Low) levels of cynicism.

H11: Cynicism climate moderates the indirect relation between leader moral courage and group social undermining through followers' perception of humble leadership so that the relation is weaker (Vs. Stronger) at high (Vs. Low) levels of cynicism.

Methods

Population and Sample

This study focuses on public universities in Upper Egypt. According to Steele and Rickards (2021), universities play a crucial role in advancing society by serving as catalysts for broader societal change. They contribute significantly across four key functions: teaching and learning, research impact, external leadership, and internal operations. To effectively serve as enablers of change, universities must act as both subjects and agents of transformation, exemplifying the approaches and impacts they seek to promote (Musenze, Mayende, Wampande, Kasango, & Emojong, 2021). Building on this premise, the present study aims to enhance leadership conditions within universities, thereby strengthening their ability to achieve institutional goals and contribute meaningfully to societal development.

Upper Egypt's public universities were selected as the study community, including Sohag, South Valley, Luxor, and Aswan Universities, for several reasons. First, these institutions collectively enroll approximately 150,000 students, representing a significant portion of Upper Egypt's student population (Annual Bulletin of Enrolled Students - Teaching Staff Higher Education, 2024). Second, they have received substantial attention from political leadership, with

the government making considerable efforts to enhance both educational and infrastructural development. As a result, the higher education sector in the region has experienced unprecedented progress, following a carefully planned schedule and program (The Egyptian Ministry of Higher Education & Scientific Research, 2020). Third, these universities encompass up to 40 colleges and employ approximately 7,000 academic staff members (Annual Bulletin of Enrolled Students - Teaching Staff Higher Education, 2024), providing a robust setting for examining the relationships between variables, particularly given the study's focus on group dynamics.

Data were collected from departmental groups across four universities in Upper Egypt: Sohag (37%), South Valley (33%), Aswan (21%), and Luxor (9%). These groups consisted of academic staff, who served as followers, while department heads acted as direct leaders, and deans held senior supervisory roles. The sample included 153 groups of academic staff, with an average of eight members per group. Prior to survey administration, participants were informed that their participation was entirely voluntary, their responses would remain confidential, and the study was solely for scientific research purposes, with no connection to organizational evaluation. Data collection occurred in two phases over four weeks to minimize consistency bias and align with the anticipated causal effects. In the first phase, 700 questionnaires were distributed to academic staff, yielding an 88.2% response rate. Participants assessed their leaders' moral courage and humble leadership, the cynicism climate, and perceived task interdependence (as a control variable). In the second phase, the same group received an additional 700 questionnaires measuring group cooperation, group sanctioning, and group social undermining, with an 86.2% response rate. After excluding incomplete responses, 607 questionnaires from 153 departments were retained for the final analysis.

Research Variables and Measurement Instruments

The survey materials and measurements were translated from English to Arabic by an author proficient in both languages. To ensure accuracy, a back-translation procedure was employed, adhering to established methods (Brislin, Lonner, & Thorndike, 1973), for both language versions. It is important to note that certain scales, such as Leader moral courage, necessitated adjustments in context or reference point from self to others. Further details regarding the scales will be provided later. Leader Moral Courage (independent variable) was measured utilizing Sekerka et al.'s (2009) ten-item scale. The survey comprises two questions corresponding to each of the five dimensions of moral courage delineated by the authors. Participants are prompted to rate their responses using a 6-point Likert scale. An example of those items is, "My head of department considers their motives when pursuing the mission to ensure they align with moral objectives" ($\alpha = 0.92$).

Perceived humble Leadership (mediator variable) was measured by using the nine-item scale ($\alpha = 0.91$) developed by Owens et al. (2013). An example of items is: "My department head is open to the ideas of others". Each of the nine items was rated on a five-point scale

Group Cooperation was measured by using a scale developed by Varella et al. (2012), comprising 9 items. Respondents used a 7-point Likert scale to express their agreement with statements reflecting the group's behavior. An example of such items is: 'My coworkers and I always find support from the department and volunteer help to each other, even when not asked'. The Cronbach's α of the scale was 0.94.

Group Sanctioning (dependent variable) was measured by a scale created by Varella et al. (2012), which comprises 7 items. Respondents utilized a 7-point Likert scale to indicate their level of agreement with statements reflecting the group's behavior. An example item is: 'My coworkers and I ostracize nonconforming members of the department'. The Cronbach's α of the scale was 0.937.

Group Social Undermining (dependent variable) was measured using a scale developed by Duffy, Shaw, Scott, & Tepper (2006), consisting of 7 items. Faculty members were prompted to indicate the frequency with which their group members engaged in specific behaviors. Respondents used a 7-point Likert scale to express their agreement with statements reflecting the group's behavior. An example item is: 'How often department members criticized them in front of other members?' The Cronbach's α of the scale was 0.92.

Cynicism Climate (moderator variable) was evaluated using belief items sourced from the Organizational Cynicism Scale, developed by Dean et al. (1998). Cynicism Climate pertains to the predominant beliefs among members and encompasses 5 items. Participants were instructed to rate their responses using a 7-point Likert scale. An example item is: 'I think the department administration is saying one thing and doing something else.' The Cronbach's α of the scale was 0.87.

Control variables employed in the data analysis encompassed department size, obtained from the Human Resources Department of each college, and perceived task interdependence. Perceived task interdependence refers to the extent to which an individual group member perceives their reliance on fellow group members to effectively fulfill their job responsibilities (Brass, 1985; Kiggundu, 1983). It closely aligns with concepts such as group cooperation (Van der Vegt & Janssen, 2003). In this study, perceived task interdependence served as a control variable to showcase the distinctiveness of group outcomes from task interdependence. It was measured by using a scale developed by Van der Vegt, Emans, & Van de Vliert (2000, 2001), comprising 5 items. Participants were instructed to rate their responses using a 7-point Likert scale. An example item is: "I rely on information and advice from my colleagues to perform my job

effectively ". The Cronbach's α of the scale was 0.86.

Results

Ensuring the quality of measures is essential prior to conducting hypothesis testing. Convergent validity is determined by statistically significant standardized factor loadings ($> .5$) and an average variance extracted (AVE) exceeding $.5$. Discriminant validity, which denotes differences between constructs, is established when the AVE surpasses the squared correlation estimate between variables. Various fit indices, assessing both absolute and incremental fit, evaluate the goodness-of-fit of measures. Common absolute fit indices include chi-square, χ^2/df ratio, root mean square error of approximation (RMSEA), and standardized root mean residual (SRMR). Incremental fit indices encompass the Tucker-Lewis index (TLI) and comparative fit index (CFI) (Hair, Black, Babin, & Anderson, 2010).

Discriminant validity was assessed by comparing the Average Variance Extracted (AVE) with squared correlation estimates. A construct is considered to exhibit discriminant validity if its AVE exceeds the squared correlation with any other construct. The discriminant validity values for leader moral courage, humble leadership, cynicism climate, group cooperation, group sanctioning, and group social undermining were 0.92, 0.89, 0.88, 0.92, 0.89, and 0.88, respectively, indicating no validity concerns. This assessment was conducted using Gaskin and Lim's (2016) Master Validity Tool in Amos 23.

Convergent validity, which is upheld by an Average Variance Extracted (AVE) of at least 0.5, was affirmed, as AVE values surpassed 0.5 for all variables: leader moral courage (0.81), humble leadership (0.88), cynicism climate (0.79), group cooperation (0.79), group sanctioning (0.82), and group social undermining (0.85). Gaskin & Lim's (2016) Master Validity Tool in Amos 23 was employed for measurement, supplemented by a two-level Confirmatory Factor Analysis (CFA) to evaluate goodness-of-fit and distinctiveness using Mplus 7.3 (Muthen & Muthen, 2012), adopting a contemporary two-level CFA approach.

Confirmatory Factor Analysis (CFA) was executed, as illustrated in Table 1, encompassing variables such as leader moral courage, humble leadership, cynicism climate, group sanctioning, group cooperation, and group social undermining. The proposed six-factor model demonstrated satisfactory fit indices ($\chi^2 (774) = 3514.881$, $p < .001$, TLI = .92, CFI = .92, SRMR = .026, RMSEA = .06). This model underwent comparison with alternative models, affirming its superiority over models that amalgamated leader moral courage and humble leadership (alternative model 1), combined group sanctioning and group social undermining (alternative model 2), and merged leader moral courage, humble leadership, and cynicism climate into a single factor (alternative model 3). These findings provide validation for the hypothesized model.

Table.1: *Two-level CFA of the hypothesized measurement model, model 1, model 2, and model 3*

Fit index	Model			Model 1			Model 2			Model 3		
	Resuls	Rule of thumb	Was good achieved?	Results	Rule of thumb	Was good achieved?	Results	Rule of thumb	Was good achieved?	Results	Rule of thumb	Was good achieved?
χ^2	3514.881	-	-	-	7438.28	-	-	-	8705.321	-	-	-
Df	774	-	-	-	779	-	-	-	786	-	-	-
P	0.000	-	-	-	0.000	-	-	-	0.000	-	-	-
χ^2/df	4.54	≤ 5	YES	-	9.55	≤ 5	NO	-	11.07	≤ 5	NO	-
SRMR	0.026	< 0.08	YES	-	0.13	< 0.08	NO	-	0.13	< 0.08	NO	-
RMSEA	0.06	0.055 – 0.08	YES	-	0.14	0.055 – 0.08	NO	-	0.15	0.055 – 0.08	NO	-
CFI	0.92	0.90 – 0.94	YES	-	0.79	0.90 – 0.94	NO	-	0.74	0.90 – 0.94	NO	-
TLI	0.92	0.90 – 0.94	YES	-	0.74	0.90 – 0.94	NO	-	0.71	0.90 – 0.94	NO	-

Data Aggregation

Aggregating data from individual scores to unit scores was justified through three methods (LeBreton & Senter, 2008): inter-rater agreement (rwg), intra-class correlation coefficient (ICC1), and reliability of group mean (ICC2). All rwg values (leader moral courage: 0.89, humble leadership: 0.91, cynicism climate: 0.90, group cooperation: 0.89, group sanctioning: 0.91, group social undermining: 0.85, perceived task interdependence: 0.86) fell within the strong agreement range, indicating suitability for aggregation. ICC1 values were above 0.10 (leader moral courage: 0.21, humble leadership: 0.22, cynicism climate: 0.67, group cooperation: 0.42, group sanctioning: 0.51, group social undermining: 0.51, perceived task interdependence: 0.09), supporting aggregation, except for perceived task interdependence, which was slightly below the criterion. Statistically significant F ratios associated with ICC1 values were observed. ICC2 values (leader moral courage: 0.59, humble leadership: 0.51, cynicism climate: 0.89, group cooperation: 0.65, group sanctioning: 0.88, group social undermining: 0.81, perceived task interdependence: 0.34) exceeded the proposed standard of 0.70, except for leader moral courage, humble leadership, and perceived task interdependence (Further details of the results can be obtained upon request from the first author). Chen & Bliese (2002) indicated that if there is theoretical support and other indicators (e.g., rwg and ICC(1)) are met, a low ICC(2) value does not pose a barrier to aggregating variables. Therefore, the above results suggest that aggregating individual scores at the group level is justified.

Descriptive statistics: Correlation matrix

Preliminary analysis using Pearson correlation unveiled significant associations among core variables at the group level, as depicted in Table 2.

Leader moral courage exhibited a positive correlation with humble leadership ($r = .44, p < .01$), while humble leadership showed positive correlations with group cooperation ($r = .49, p < .01$) and negative correlations with group sanctioning ($r = -.41, p < .01$) and group social undermining ($r = -.32, p < .01$).

Table. 2: *The two-way linear correlation coefficients between variables-group level*

Sr.no.	Variable	1	2	3	4	5	6
1	Leader moral courage	-					
2	humble leadership	.44**	-				
3	Cynicism climate	-.07	-.14	-			
4	Group cooperation	.49**	.49**	-.13	-		
5	Group sanctioning	-.29**	-.41**	.32**	-.20**	-	
6	Group social undermining	-.17*	-.32**	.29**	-.19*	.51**	-

Note, $N = 153$. ** $p < .01$. * $p < .05$.

Hypotheses Testing

To examine the study hypotheses, the researcher utilized moderated mediation path analysis within Mplus 7.3 (Muthén & Muthén, 2012). Mplus is a comprehensive statistical analysis software capable of handling a wide array of statistical models, particularly intricate ones, allowing for the simultaneous testing of multiple relationships, including mediation and moderation. Consistent with Dawson's (2014) suggestions and to facilitate interpretation, all study variables were z-standardized.

This section explores hypothesis testing by dividing it into two primary models. In Model 1, the researcher examined direct and indirect effects (mediation roles) hypotheses (i.e., H1–H7), where: (1) leader moral courage, cynicism climate, along with control variables (group size and perceived task interdependence), were predictors of humble leadership (i.e., the a-path); (2) Humble leadership, leader moral courage, cynicism climate, as well as control variables (group size and perceived task interdependence), were specified to predict group sanctioning, group cooperation, and group social undermining (i.e., the b-path for leader moral courage as an independent variable and a-path for humble leadership as an independent variable). In Model 2, the researcher tested moderated mediation hypotheses (i.e., H8–H11) by additionally incorporating interaction effects between leader moral courage and cynicism climate. To assess the proposed moderated mediation model, the study adhered to recommendations by Preacher and colleagues (2007) and employed bias-corrected bootstrapping with 10,000 bootstrap resamples (see Figure 2).

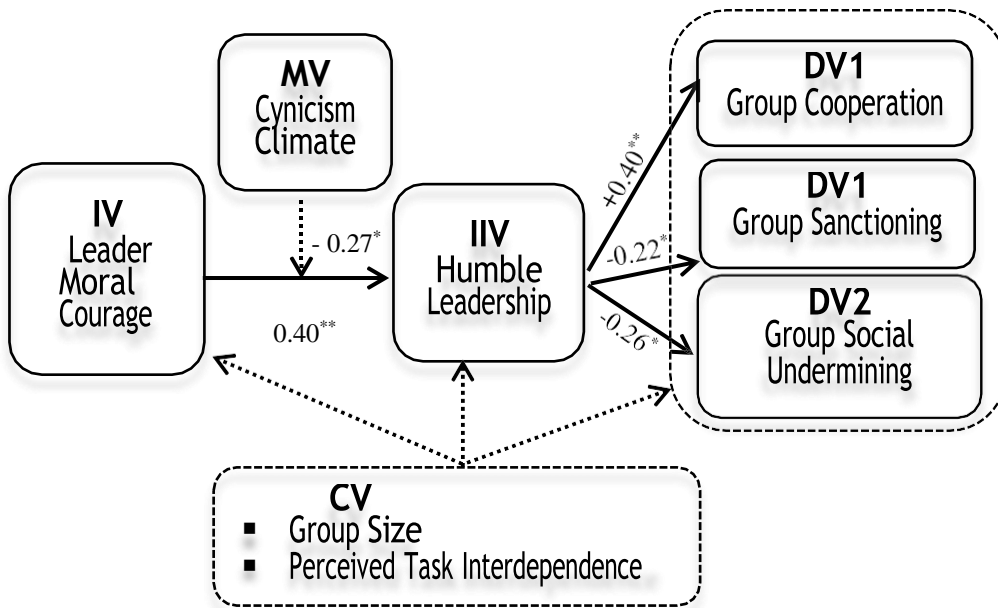


FIGURE. 2. Path Coefficient Model
 Source: developed by authors

Direct effects

The findings regarding the relationship between leader moral courage and humble leadership are presented in Table 3. Research hypothesis 1 suggests a positive connection between leader moral courage and humble leadership. Model 1 in Table 3 provides evidence supporting this hypothesis, showing a significant and positive relationship between leader moral courage and humble leadership ($\beta = 0.48$, $t = 2.31$, $p < .01$). This supports H1. Additionally, in accordance with Hypotheses 2-4, the researcher discovered that humble leadership is positively and significantly associated with group cooperation ($\beta = 0.40$, $t = 2.59$, $p < .01$), while having negative and significant relationships with both group sanctioning ($\beta = -0.22$, $t = -2.16$, $p < .05$) and group social undermining ($\beta = -0.26$, $t = -2.27$, $p < .05$). These findings offer support for H2, H3, and H4.

Table. 3: Path Analysis Results

Independent variables	Model 1											
	Humble leadership			Group cooperation			Group sanctioning			Group social undermining		
	B	SE	T	B	SE	T	B	SE	T	B	SE	T
Group size	-.06	.06	-.89	.04	.04	.78	.06	.04	1.07	-.01	.07	-.03
Task interdependence	.11	.08	1.19	-.09	.06	-1.38	.11	.08	1.37	.05	.08	.53
Leader Moral Courage	.48**	.17	2.31	.24*	.14	2.29	-.14	.11	-1.74	-.03	.08	-.22
Cynicism climate	-.07	.06	-.78	-.07	.07	-1.09	-.29*	.16	2.06	.22	.17	1.63
Humble leadership				.40**	.14	2.59	-.22*	.13	-2.16	-.26*	.09	-2.27
R ²		.28			.42			.31			.21	
N		153			153			153			153	

Notes. N = 153 group. unstandardized regression coefficients are reported.

*p<0.05, **p<0.01.

Indirect effects

Hypothesis 5 of the study posited that there is a positive correlation between leader moral courage and group cooperation, with humble leadership playing a mediating role. The findings confirm this hypothesis, revealing a positive mediation effect of humble leadership on the relationship between leader moral courage and group cooperation (indirect effect: 0.201; 95% CI Low = 0.026; CI High = 0.377). Consequently, Hypothesis 5 is supported. Conversely, Hypothesis 6 suggested that the link between leader moral courage and group sanctioning hinges on followers' perceptions of humble leadership, while Hypothesis 7 proposed a similar mediation effect on the relationship between leader moral courage and group social undermining. The results indicate that humble leadership acts as a mediator, mitigating the negative associations between leader moral courage and both group sanctioning (indirect effect: -0.144; 95% CI Low = -0.201; CI High = -0.013) and group social undermining (indirect effect: -0.134; 95% CI Low = -0.221; CI High = -0.014), thereby corroborating Hypotheses 6 and 7.

4.3.3 | Interactive effects

Hypothesis 8 suggested that the cynicism climate has a moderating effect on the relationship between leader moral courage and humble leadership. It proposed that this relationship is weaker when the cynicism climate is high and stronger when it is low. The findings from Model 2 in Table 4 demonstrate that the interaction between leader moral courage and cynicism climate significantly and negatively predicts humble leadership ($\beta = -0.27$, $t = -2.22$, $p < .05$). Following Baron & Kenny's criteria (1986), the conditional effects analysis shows that the interaction term significantly predicts humble leadership (R^2 -change = 0.110, $F(1,129) = 20.66$, $p < .01$). Thus, Hypothesis 8 receives support from the results.

Table. 4: *Path Analysis Results – Model2*

Independent variables	Model 2											
	Humble leadership			Group cooperation			Group sanctioning			Group social undermining		
	B	SE	T	B	SE	T	B	SE	T	B	SE	T
Group size	-.07	.06	-1.19	.04	.04	.78	.06	.04	1.07	-.01	.07	-.03
Task interdependence	.12	.08	1.22	-.09	.06	-1.38	.11	.08	1.37	.05	.08	.53
Leader Moral Courage	.40**	.17	2.41	.24*	.14	2.29	-.14	.11	-1.74	-.03	.08	-.22
Cynicism climate	.07	.05	.81	-.07	.07	-1.09	-.29*	.16	2.06	.22	.17	1.63
Humble leadership	-	-	-	.40**	.14	2.59	-.22*	.13	-2.16	-.26*	.09	-2.27
Leader Moral Courage x Cynicism climate	-.28*	.12	-2.22	-	-	-	-	-	-	-	-	-
R ²	-	.39	-	.42	-	-	-	.31	-	-	.21	-
N	-	153	-	153	-	-	-	153	-	-	153	-

Notes. N = 153 group. unstandardized regression coefficients are reported. *p<0.05, **p<0.01

Moreover, in accordance with the recommendation of Aiken, West, & Reno (1991), the researcher conducted simple slope analyses. This involved regressing humble leadership on leader moral courage for both high (mean + 1 SD) and low (mean – 1 SD) levels of cynicism climate. The analysis revealed that for low cynicism climate, the slope was significant and positive (–1 SD, $\beta = 0.63$, $t = 4.06$, $p < .01$; 95% CI Low = 0.441; CI High = 0.889), indicating a meaningful relationship between leader moral courage and humble leadership. Conversely, for groups experiencing a high cynicism climate, there was no discernible relationship between leader moral courage and humble leadership (+1 SD, $\beta = 0.18$, $t = 0.49$, ns; 95% CI Low = -0.289; CI High = 0.606). The interaction effect is depicted in Figure 3.

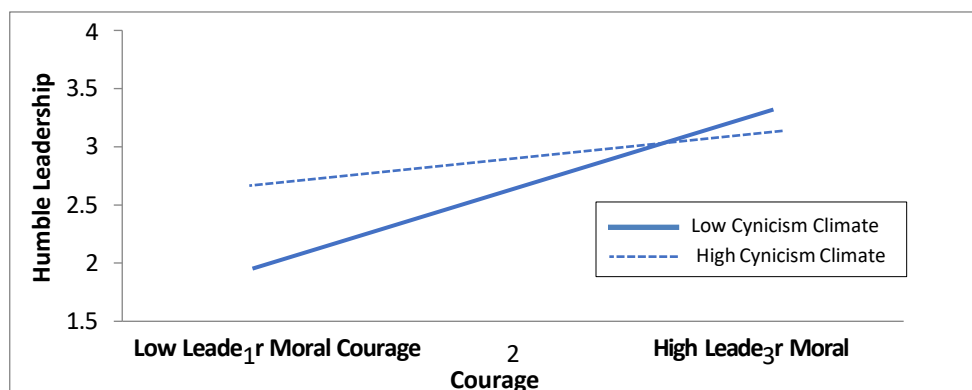


FIGURE.3. Moderating effect of cynicism climate on the relationship between leader moral courage and humble leadership

Moderated Mediation Effects

The study posited three hypotheses (H9, H10, and H11) suggesting the presence of conditional indirect effects within the proposed model. To analyze the conditional indirect effect of leader moral courage through humble leadership on various group outcomes (group sanctioning, group cooperation, and group social undermining), 10,000 bootstrap samples were extracted. Point estimation and 95% bias-corrected bootstrap confidence intervals were calculated for the conditional indirect effects of cynicism climate on group cooperation. The findings indicate a significant and positive indirect relationship, through humble leadership, between leader moral courage and group cooperation when cynicism climate is low (conditional indirect effect = 0.266, 95% bias-corrected CI = [0.066; 0.480] at -1SD). However, this relationship becomes insignificant at high levels of cynicism climate (conditional indirect effect = 0.055, 95% bias-corrected CI = [-0.136; 0.360] at +1 SD). This suggests that the indirect relationship between leader moral courage and group cooperation via humble leadership tends to diminish in positivity under higher levels of cynicism climate, thereby providing support for Hypothesis 9.

The point estimation and the 95 percent bias-corrected bootstrap confidence intervals (CIs) were calculated for the conditional effects of cynicism climate. The analysis indicates that the indirect relationship between leader moral courage and group sanctioning, mediated by humble leadership, is only significant at below-average levels of cynicism climate (conditional indirect effect = -0.187, 95% bias-corrected CI = [-0.214; -0.063] at -1 SD). Conversely, this indirect relationship becomes insignificant when the cynicism climate is high (conditional indirect effect = -0.039, 95% bias-corrected CI = [-0.155; 0.072] at +1 SD). These findings support the assumption that the negative

indirect effect of leader moral courage on group sanctioning through humble leadership, which varies according to cynicism climate, is less negative in more cynical climates. Thus, these results provide support for Hypothesis 10.

The results also reveal that the indirect relationship between leader moral courage and group social undermining, mediated by humble leadership, is significant and negative when the cynicism climate is low (conditional indirect effect = -0.189, 95% bias-corrected CI = [-0.341; -0.051] at -1SD). However, this relationship becomes insignificant at high levels of cynicism climate (conditional indirect effect = -0.048, 95% bias-corrected CI = [-0.171; 0.099] at +1 SD). These findings illustrate that the indirect connection between leader moral courage and group social undermining through humble leadership tends to become more negative when cynicism climate is lower, thereby providing support for Hypothesis 11.

Discussion and conclusion

This study demonstrates the critical role of moral courage in shaping followers' perceptions of a leader's humility and, consequently, influencing their behaviors. These findings align with previous research on humble leadership, which indicates that leaders who demonstrate moral courage are more likely to be perceived as humble, fostering trust, collaboration, and ethical workplace behaviors (Chughtai & Arifeen, 2023; Comer & Vega, 2011; Hannah & Avolio, 2010). Furthermore, this supports earlier studies identifying moral courage as a key ethical competency that strengthens leaders' credibility and enhances their ability to positively influence followers (Sekerka et al., 2009; Treviño et al., 2000).

Consistent with the attribution theory of Kelley and Michela (1980), this study explains how followers perceive leaders' moral courage as an indicator of humble leadership. These findings align with prior research demonstrating that employees attribute leadership characteristics based on observable behaviors and contextual cues (Harvey et al., 2014). In addition, the study supports the idea that moral courage serves as a strong leadership signal, reinforcing the application of Spence's (1978) signaling theory in leadership research. Leaders who demonstrate moral courage send clear signals of their ethical intentions, which followers evaluate within their workplace context. However, the study also identifies the moderating role of a cynical climate, which weakens the positive effects of moral courage on perceptions of humble leadership and group behaviors. These findings are consistent with prior research highlighting the harmful effects of organizational cynicism on leadership effectiveness and employee engagement (Hewett et al., 2019; Nguyen et al., 2020; Dean et al., 1998). While previous studies have primarily examined the influence of humble leadership on individual creativity and psychological safety (Wang et al., 2018; Chen et al., 2021), this study expands the literature by exploring its

impact on group cooperation, sanctioning, and social undermining. The findings indicate a positive correlation between humble leadership and group cooperation, consistent with Li et al. (2020) and Ou et al. (2014), who found that humble leadership fosters a cohesive and supportive team environment. Furthermore, this study reveals that humble leadership is associated with lower levels of group sanctioning and social undermining, reinforcing the notion that humble leadership cultivates ethical group norms and discourages counterproductive behaviors (Varella et al., 2012).

By integrating signaling and attribution theories, this study provides a deeper understanding of how followers perceive and respond to humble leadership in different organizational climates. The findings emphasize that while moral courage serves as a critical signal of ethical leadership, the broader organizational climate influences how these signals are interpreted and acted upon. This perspective contributes to the ongoing discourse on leadership effectiveness by highlighting the importance of context in shaping leadership outcomes (Chandler et al., 2023; Kelemen et al., 2023).

In summary, this study enriches the literature on humble leadership by bridging gaps in understanding its antecedents and consequences at both individual and group levels. By confirming and extending prior research, it underscores the role of moral courage in enhancing perceptions of humble leadership while also identifying the limiting effects of a cynical climate. Future research should explore how organizational interventions can mitigate cynicism and strengthen the positive effects of humble leadership in fostering ethical and cooperative group dynamics.

Theoretical implications

Findings of this study add new insights to the current literature addressing the interdependencies among leader's moral courage, followers' perceptions of leader's humility, cynical climate and followers' behavior in several key ways. It deepens our understanding of these concepts by examining their effects on group behaviors, including cooperation, sanctioning, and social undermining. This study provides new insights that advance the literature on humble leadership and enhance our understanding of this specific leadership style within work teams.

First, while a noticeable gap exists in research exploring the antecedents of humble leadership perceptions (Chandler et al., 2023), this study bridges this gap by investigating the factors that influence perceptions of humble leadership. It emphasizes that leader moral courage extends beyond individual virtue and impacts the broader organizational context. Despite the growing scholarly interest in leader behaviors (Paterson & Huang, 2018), this study broadens this discourse by establishing connections between leader moral courage and the prevailing cynicism climate, both of which influence humble leadership. Drawing on signaling theory (Spence, 1978) and attribution theory (Kelley &

Michela, 1980), the study explains how followers perceive humble leadership, showing that moral signals from leaders, viewed as deliberate and beneficial, shape followers' perceptions, while external factors such as a cynicism climate can diminish these views.

Second, the study expands the application of signaling theory in humble leadership and integrates attribution theory, contributing to the evolution of theoretical approaches in organizational sciences. Scholars in this field have advocated for the adoption of signaling theory (Banks et al., 2021) and an attribution theory perspective (Harvey et al., 2014) when examining workplace phenomena. Consequently, this study offers new theoretical frameworks for exploring the antecedents and consequences of humble leadership.

Third, the current body of literature lacks comprehensive studies on how humble leadership influences the attitudes and behaviors of followers in group settings (Kelemen et al., 2023). Previous research on humble leadership has primarily examined it from an individual-level perspective (Zhou & Wu, 2018). Consequently, this study addresses this gap by investigating how leaders' humble behaviors impact followers within group contexts, with a particular focus on group behaviors such as cooperation, sanctioning, and social undermining. This research establishes a foundation for future inquiries into the effects of humble leadership on group outcomes.

In the realm of behavioral ethics and humble leadership, the findings reveal how leaders' moral principles foster ethical conduct, emphasizing the significance of moral courage and humble leadership in promoting cooperation while mitigating sanctioning and social undermining behaviors within groups. This study substantially enhances our understanding of these dynamics and fills critical gaps in the existing knowledge.

Practical implications

The findings of this study offer valuable guidance for university leaders who prioritize interpersonal relationships. Encouraging informal social interactions through personal engagement and meaningful connections can positively influence academic staff, fostering improved group dynamics within public universities. The perception of leaders as humble enhances group cooperation while simultaneously reducing sanctioning and social undermining. Consequently, these findings support the implementation of training programs aimed at cultivating humble leadership behaviors at the group level within universities. Such initiatives can equip supervisors with the ethical knowledge and leadership skills necessary for fostering a positive and collaborative academic environment. University leaders of diverse groups should provide clarity on the norms of appropriate social behavior. To achieve this, they should cultivate a strong social feedback-seeking climate that encourages group members with varied perspectives to seek information about their social

interactions. According to Al-Atwi, Cogswell, and Liu (2024), promoting effective communication through employee assistance programs should be a priority for leaders. These programs are vital for developing employees' social skills, such as using appropriate body language and considering different perspectives in communication, thereby reducing the risk of misunderstandings. Organizations must address not only the latent and active causes of human errors that lead to accidents but also the factors contributing to unintended social errors.

The consequences of such social mistakes can be as detrimental as other types of human errors. Just as organizations establish guidelines and programs to prevent accidents, they must also implement behavioral instructions and guidelines to mitigate unintended social errors (e.g., cynicism) in the workplace.

Additionally, it's vital to encourage department heads and supervisors to serve as role models of humble conduct for their group members. Through observation and learning from these role models, employees can develop a deeper appreciation for moral values, fostering trust and potentially enhancing group behaviors. Implementing training programs aimed at cultivating humble leadership is crucial for universities. These initiatives are designed to equip supervisors with ethical knowledge and skills, fostering moral behavior at the group level and ultimately improving overall group behaviors. To counteract the detrimental effects of a cynical climate, it's essential to implement measures such as promoting organizational justice, avoiding psychological violations, and involving workers in decision-making processes. Previous studies have demonstrated that these actions play a significant role in reducing organizational cynicism (Dean et al., 1998).

Limitations and future research

The current study demonstrates notable strengths in design and theoretical contributions. However, limitations regarding generalizability arise from the focus on academic staff in public universities, cautioning against direct application of findings to other sectors. The use of a cross-sectional design, while suitable for initial evidence, restricts causal inference. Future research could benefit from a longitudinal approach to observe changes over time. Reliance on self-report data introduces common method variance, although steps were taken to address this issue. Integrating self-report measures with objective data may improve data quality. The study encourages exploration of additional leader behaviors, such as leader ethical voice, as antecedents of humble leadership perceptions. Further investigations into the impact of humble leadership perceptions on various group behaviors, including group organizational citizenship and counterproductive work behaviors, are recommended. Additionally, exploring the moderating effect of leader emotions (e.g., leader guilt) on the relationship between a leader's moral courage and followers' perceptions of humble leadership, as well as examining the correlation between a leader's moral courage and different leadership styles, present avenues for future research.

References

- Adams, J. S. (1963). Towards an understanding of inequity. *The Journal of Abnormal and Social Psychology*, 67(5), 422–436. <https://doi.org/10.1037/h0040968>.
- Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple regression: Testing and interpreting interactions*. sage.
- Al-Atwi, A. A., Cogswell, J. E., & Liu, C. (2024). “I Am Sorry, But I Did Not Mean to Hurt You”: A Moderated-Mediation Model of Group Non-Purposeful Ostracism. *Journal of Business and Psychology*, 1-20. <https://doi.org/10.1007/s10869-024-09956-5>.
- Annual Bulletin of Students Enrolled- Teaching Staff Higher Education (2024) , Arab Republic of Egypt Central Agency for Public Mobilization & Statistics, Issue: December 2024, Available at: https://www.capmas.gov.eg/Pages/Publications.aspx?page_id=5104&YearID=23350.
- Banks, G. C., Fischer, T., Gooty, J., & Stock, G. (2021). Ethical leadership: Mapping the terrain for concept cleanup and a future research agenda. *The Leadership Quarterly*, 32(2), 101471. <https://doi.org/10.1016/j.leaqua.2020.101471>.
- Baron, R. & Kenny, D. (1986): The moderator-mediator variable distinction in social psychological research conceptual strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51 (1), 1173–1182. <https://doi.org/10.1037/0022-3514.51.6.1173>.
- Barsky, A., Kaplan, S. A., & Beal, D. J. (2011). Just feelings? The role of affect in the formation of organizational fairness judgments. *Journal of Management*, 37(1), 248–279. <https://doi.org/10.1177/0149206310376325>.
- Bharanitharan, D. K., Lowe, K. B., Bahmannia, S., Chen, Z. X., & Cui, L. (2021). Seeing is not believing: Leader humility, hypocrisy, and their impact on followers' behaviors. *The Leadership Quarterly*, 32(2). <https://doi.org/10.1016/j.leaqua.2020.101440>.
- Bommer, W. H., Dierdorff, E. C., & Rubin, R. S. (2007). Does prevalence mitigate relevance? The moderating effect of group-level OCB on employee performance. *Academy of management journal*, 50(6), 1481-1494. <https://doi.org/10.5465/amj.2007.28226149>
- Brass, D. J. (1985). Technology and the structuring of jobs: Employee satisfaction, performance, and influence. *Organizational Behavior and Human Decision Processes*, 35(2), 216–240. [https://doi.org/10.1016/0749-5978\(85\)90036-6](https://doi.org/10.1016/0749-5978(85)90036-6)
- Brislin, R. W., Lonner, W. J., & Thorndike, R. M. (1973). *Cross-cultural research methods*. New York: John Wiley.
- Brown, M., Cregan, C., Kulik, C. T., & Metz, I. (2022). Managing voluntary collective turnover: the impact of a cynical workplace climate. *Personnel Review*, 51(2), 715-730. <https://doi.org/10.1108/PR-12-2019-0703>
- Cable, D. (2018), “How humble leadership really works”, *Harvard Business Review*, available at: <https://hbr.org/2018/04/how-humble-leadership-reallyworks>.
- Chandler, J. A., Johnson, N. E., Jordan, S. L., & Short, J. C. (2023). A meta-analysis of humble leadership: Reviewing individual, group, and organizational

outcomes of leader humility. *The Leadership Quarterly*, 34(1), 101660. <https://doi.org/10.1016/j.leaqua.2022.101660>.

Chen, C., Feng, J., Liu, X., & Yao, J. (2021). Leader humility, group job crafting and group creativity: The moderating role of leader–leader exchange. *Human Resource Management Journal*, 31(1), 326–340. <https://doi.org/10.1111/1748-8583.12306>.

Chen, G., & Bliese, P. D. (2002). The role of different levels of leadership in predicting self-and collective efficacy: evidence for discontinuity. *Journal of applied psychology*, 87(3), 549. <https://doi.org/10.1037/00219010.87.3.549>.

Chen, L., Liu, S., Wang, Y., & Hu, X. (2021). Humble leader behavior and group creativity: the group learning perspective. *Journal of Managerial Psychology*, 36(3), 272-284. <https://doi.org/10.1108/JMP-09-2019-0536>.

Chiu, C. Y., Balkundi, P., Owens, B. P., & Tesluk, P. E. (2022). Shaping positive and negative ties to improve group effectiveness: The roles of leader humility and group helping norms. *Human relations*, 75(3), 502-531. <https://doi.org/10.1177/0018726720968135>.

Chughtai, A. A., & Arifeen, S. R. (2023). Humble leadership and career success: a moderated mediation analysis. *Management Decision*, 61(6), 1485-1500. <https://doi.org/10.1108/MD-05-2022-0651>.

Comer, D. R., & Sekerka, L. E. (2018). Keep calm and carry on (ethically): Durable moral courage in the workplace. *Human Resource Management Review*, 28(2), 116–130. <https://doi.org/10.1016/j.hrmr.2017.05.011>.

Comer, D. R., & Vega, G. (Eds.). (2011). *Moral courage in organizations: Doing the right thing at work*. Armonk, NY: M.E. Sharpe.

Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, 37(1), 39–67. <https://doi.org/10.1177/0149206310388419>

Craig, S. B., & Gustafson, S. B. (1998). Perceived leader integrity scale: An instrument for assessing employee perceptions of leader integrity. *The Leadership Quarterly*, 9(2), 127-145. [https://doi.org/10.1016/S1048-9843\(98\)90001-7](https://doi.org/10.1016/S1048-9843(98)90001-7)

Davis, W. D., & Gardner, W. L. (2004). Perceptions of politics and organizational cynicism: An attributional and leader–member exchange perspective. *The Leadership Quarterly*, 15(4), 439-465. <https://doi.org/10.1016/j.leaqua.2004.05.002>.

Dawson, J. F. (2014). Moderation in management research: What, why, when, and how. *Journal of business and psychology*, 29(1), 1-19. <https://doi.org/10.1007/s10869-013-9308-7>.

Dean, J. W., Brandes, P., & Dharwadkar, R. (1998). Organizational cynicism. *Academy of Management Review*, 23(2), 341–352. <https://doi.org/10.5465/AMR.1998.533230>.

Ding, H., Yu, E., Chu, X., Li, Y., & Amin, K. (2020). Humble leadership affects organizational citizenship behavior: The sequential mediating effect of strengths use and job crafting. *Frontiers in Psychology*, 11, 65. <https://doi.org/10.3389/fpsyg.2020.00065>.

Duffy, M. K., Shaw, J. D., Scott, K. L., & Tepper, B. J. (2006). The moderating roles of self-esteem and neuroticism in the relationship between group

and individual undermining behavior. *Journal of applied psychology*, 91(5), 1066-1077. <https://doi.org/10.1037/0021-9010.91.5.1066>

Gaskin, J., & Lim, J. (2016). Master validity tool. AMOS Plugin In: Gaskination's StatWiki.

Gonçalves, L., & Brandão, F. (2017). The relation between leader's humility and group creativity: The mediating effect of psychological safety and psychological capital. *International Journal of Organizational Analysis*, 25(4), 687-702. <https://doi.org/10.1108/IJOA-06-2016-1036>.

Gong, Y., Chang, S., & Cheung, S. Y. (2010). High performance work system and collective OCB: A collective social exchange perspective. *Human Resource Management Journal*, 20(2), 119–137. <https://doi.org/10.1111/j.1748-8583.2010.00123.x>.

Gottlieb, J. Z., & Sanzgiri, J. (1996). Towards an ethical dimension of decision making in organizations. *Journal of Business Ethics*, 15, 1275-1285. <https://doi.org/10.1007/BF00411813>.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis: Overview of Multivariate Methods (Seventh Edition ed.)*. Pearson Prentice Hall: Upper Saddle River, New Jersey: Pearson Education International.

Hannah, S. T., & Avolio, B. J. (2010). Moral potency: Building the capacity for character based leadership. *Consulting Psychology Journal*, 62, 291–310. <https://doi.org/10.1037/a0022283>.

Harbour, M., & Kisfalvi, V. (2014). In the eye of the beholder: An exploration of managerial courage. *Journal of Business Ethics*, 119(4), 493–515. <https://doi.org/10.1007/s10551-013-1835-7>.

Harvey, P., Madison, K., Martinko, M. J., Crook, T. R., & Crook, T. (2014). Attribution theory in the organizational sciences: The road traveled and the path ahead. *Academy of Management Perspectives*, 28(2), 128–146. <https://doi.org/10.5465/amp.2012.0175>.

Hewett, R., Shantz, A., & Mundy, J. (2019). Information, beliefs, and motivation: The antecedents to human resource attributions. *Journal of Organizational Behavior*, 40(5), 570-586. <https://doi:10.1002/job.2353>.

Hu, J., Erdogan, B., Jiang, K., Bauer, T. N., & Liu, S. (2018). Leader humility and group creativity: The role of group information sharing, psychological safety, and power distance. *Journal of Applied Psychology*, 103(3), 313. <https://doi.org/10.1037/apl0000277>.

Jiang, Z., Hu, X., Wang, Z., & Jiang, X. (2019). Knowledge hiding as a barrier to thriving: The mediating role of psychological safety and moderating role of organizational cynicism. *Journal of Organizational Behavior*, 40(7), 800-818. <https://doi: 10.1002/job.2358>.

Jones, E. E., & Davis, K. E. (1965). From acts to dispositions the attribution process in person perception. In *Advances in experimental social psychology*, 2 ;219-266 . [https://doi.org/10.1016/S0065-2601\(08\)60107-0](https://doi.org/10.1016/S0065-2601(08)60107-0).

Kelemen, T. K., Matthews, S. H., Matthews, M. J., & Henry, S. E. (2023). Humble leadership: A review and synthesis of leader expressed humility. *Journal of Organizational Behavior*, 44(2), 202-224. <https://doi.org/10.1002/job.2608>.

Kelley, H. H., & Michela, J. L. (1980). Attribution theory and research.

Kidder, R. M. (2005). *Moral courage*. New York: Harper Collins.

Kiggundu, M. N. (1983). Task interdependence and job design: Test of a theory. *Organizational Behavior and Human Performance*, 31: 145–172.
[https://doi.org/10.1016/0030-5073\(83\)90118-6](https://doi.org/10.1016/0030-5073(83)90118-6)

Koerner, M. M. (2014). Courage as identity work: Accounts of workplace courage. *Academy of Management Journal*, 57(1), 63-93.
<https://doi.org/10.5465/amj.2010.0641>.

Kozlowski, S. W., & Ilgen, D. R. (2006). Enhancing the effectiveness of work groups and groups. *Psychological science in the public interest*, 7(3), 77-124.
<https://doi.org/10.1111/j.1529-1006.2006.00030.x>

LeBreton, J. M., & Senter, J. L. (2008). Answers to 20 questions about interrater reliability and interrater agreement. *Organizational research methods*, 11(4), 815-852. <https://doi.org/10.1177/1094428106296642>.

Leventhal, G. S. (1980). What should be done with equity theory? In K. J. Gergen, M. S. Greenberg, & R. H. Willis (Eds.), *Social exchange* (pp. 27–55). New York: Springer. https://doi.org/10.1007/978-1-4613-3087-5_2.

Li, M., Zhang, P., Xia, Y., & Liu, W. (2019). Shaping the shared mental model: How leader humility helps groups to learn. *Journal of Management & Organization*, 25(5), 653-671. <https://doi.org/10.1017/jmo.2017.21>.

Li, Y., Wei, F., Chen, S., & Yan, Y. (2020). Effects of CEO humility and relationship conflict on entrepreneurial performance. *The International Journal of Conflict Management*, 31(3), 489–508. <https://doi.org/10.1108/IJCMA-09-2019-0154>.

Liu, S., Lucy Liu, X., Wang, H., & Wang, Y. (2022). Humble leader behavior and its effects on performance at the group and individual level: a multi-perspective study. *Group & Organization Management*, 47(5), 1008-1041.
<https://doi.org/10.1177/10596011211024429>.

Morris, J. A., Brotheridge, C. M., & Urbanski, J. C. (2005). Bringing humility to leadership: Antecedents and consequences of leader humility. *Human relations*, 58(10), 1323-1350. <https://doi.org/10.1177/0018726705059929>.

Musenze, I.A., Mayende, T.S., Wampande, A.J., Kasango, J., & Emojong, O.R. (2021). Mechanism between perceived organizational support and work engagement: explanatory role of self-efficacy. *Journal of Economic and Administrative Sciences*, 37(4), 471-495. <https://doi.org/10.1108/JEAS-02-2020-0016>

Muthén, L. K., & Muthén, B. O. (2012). 1998–2012. Mplus user's guide. Los Angeles: Muthen & Muthen.

Nguyen, D. T. N., Teo, S. T. T., Halvorsen, B., & Staples, W. (2020). Leader humility and knowledge sharing intention: A serial mediation model. *Frontiers in Psychology*, 11, 560704. <https://doi.org/10.3389/fpsyg.2020.560704>.

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 group integration and middle managers' responses. *Administrative Science Quarterly*, 59(1), 34–72. <https://doi.org/10.1177/0001839213520131>.

Owens, B. P., & Hekman, D. R. (2016). How does leader humility influence group performance? Exploring the mechanisms of contagion and collective promotion focus. *Academy of Management Journal*, 59(3), 1088–1111. <https://doi.org/10.5465/amj.2013.0660>.

Owens, B. P., Johnson, M. D., & Mitchell, T. R. (2013). Expressed humility in organizations: Implications for performance, groups, and leadership. *Organization Science*, 24(5), 1517–1538. <https://doi.org/10.1287/orsc.1120.0795>.

Paterson, T. A., & Huang, L. (2018). Am I expected to be ethical? A role-definition perspective of ethical leadership and unethical behavior. *Journal of Management*, 45(7), 2837–2860. <https://doi.org/10.1177/0149206318771166>.

Peng, A. C., Wang, B., Schaubroeck, J. M., & Gao, R. (2020). Can humble leaders get results? The indirect and contextual influences of skip-level leaders. *Journal of Leadership & Organizational Studies*, 27(4), 329–339. <https://doi.org/10.1177/1548051820952402>.

Petrenko, O. V., Aime, F., Recendes, T., & Chandler, J. A. (2019). The case for humble expectations: CEO humility and market performance. *Strategic Management Journal*, 40(12), 1938–1964. <https://doi.org/10.1002/smj.3071>.

Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology*, 24: 1–24. <https://doi.org/10.1146/annurev.soc.24.1.1>.

Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42, 185–227. <https://doi.org/10.1080/00273170701341316>

Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42, 185–227. <https://doi.org/10.1080/00273170701341316>

Qian, X., Zhang, M., & Jiang, Q. (2020). Leader humility, and subordinates' organizational citizenship behavior and withdrawal behavior: Exploring the mediating mechanisms of subordinates' psychological capital. *International journal of environmental research and public health*, 17(7), 2544. <https://doi.org/10.3390/ijerph17072544>.

Qin, X., Liu, X., Brown, J. A., Zheng, X., & Owens, B. P. (2021). Humility harmonized? Exploring whether and how leader and employee humility (In)congruence influences employee citizenship and deviance behaviors. *Journal of Business Ethics*, 170(1), 147–165. <https://doi.org/10.1007/s10551-019-04250-4>.

Rego, A., & Simpson, A. V. (2018). The perceived impact of leaders' humility on group effectiveness: An empirical study. *Journal of Business Ethics*, 148, 205–218. <https://doi.org/10.1007/s10551-015-3008-3>.

Rego, A., Owens, B., Leal, S., Melo, A. I., e Cunha, M. P., Gonçalves, L., & Ribeiro, P. (2017). How leader humility helps groups to be humbler, psychologically stronger, and more effective: A moderated mediation model. *The Leadership Quarterly*, 28, 639–658. <https://doi.org/10.1016/j.leaqua.2017.02.002>.

Rego, A., Owens, B., Yam, K. C., Bluhm, D., Cunha, M. P. E., Silard, A., Goncalves, L., Martins, M., Simpson, A. V., & Liu, W. (2019). Leader humility and group performance: Exploring the mediating mechanisms of group PsyCap and task allocation effectiveness. *Journal of Management*, 45(3), 1009–1033 .

<https://doi.org/10.1177/0149206316688941>.

Sekerka, L. E., Bagozzi, R. P., & Charnigo, R. (2009). Facing ethical challenges in the workplace: Conceptualizing and measuring professional moral courage. *Journal of Business Ethics*, 89(4), 565–579. <https://doi.org/10.1007/s10551-008-0017-5>.

Shin, Y. (2012). CEO ethical leadership, ethical climate, climate strength, and collective organizational citizenship behavior. *Journal of Business Ethics*, 108(3), 299–312. <https://doi.org/10.1007/s10551-011-1091-7>.

Simola, S. (2018). Fostering collective growth and vitality following acts of moral courage: A general system, relational psychodynamic perspective. *Journal of Business Ethics*, 148(1), 169–182. <https://doi.org/10.1007/s10551-016-3014-0>.

Spence, M. (1978). Job market signaling. *Uncertainty in economics*, Elsevier : 281–306.

Steele, W., Rickards, L. (2021). The Role of the University in Society. In: *The Sustainable Development Goals in Higher Education*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-73575-3_3.

Swain, J. E. (2018). Effects of leader humility on the performance of virtual groups. *Journal of Leadership Studies*, 12, 21–37. <https://doi.org/10.1002/jls.21552>.

The Egyptian Ministry of Higher Education & Scientific Research, (2020). *Leading out of adversity: Policies for postcovid-19 pandemic*. Available at: https://mohe.gov.eg/ar-eg/Documents/Research_Studies/Leading_out_of_Adversity.pdf . (retrieved on June 2024).

Treviño, L. K., Hartman, L. P., & Brown, M. (2000). Moral person and moral manager: How executives develop a reputation for ethical leadership. *California Management Review*, 42(4), 128–142. <https://doi.org/10.2307/41166057>.

Van der Vegt, G. S., & Janssen, O. (2003). Joint impact of interdependence and group diversity on innovation. *Journal of Management*, 29(5), 729–751. [https://doi.org/10.1016/S0149-2063\(03\)00033-3](https://doi.org/10.1016/S0149-2063(03)00033-3)

Van der Vegt, G. S., Emans, B. J. M., & Van de Vliert, E. (2000). Affective responses to intragroup interdependence and job complexity. *Journal of Management*, 26: 633–655.

Van der Vegt, G. S., Emans, B. J. M., & Van de Vliert, E. (2001). Patterns of interdependence in work groups: A two-level investigation of the relations with job and group satisfaction. *Personnel Psychology*, 54: 51–69. <https://doi.org/10.1111/j.1744-6570.2001.tb00085.x>

Varella, P., Javidan, M., & Waldman, D. A. (2012). A model of instrumental networks: The roles of socialized charismatic leadership and group behavior. *Organization Science*, 23(2), 582–595. <http://dx.doi.org/10.1287/orsc.1100.0604>.

Vera, D., & Rodriguez-Lopez, A. (2004). Strategic virtues: humility as a source of competitive advantage. *Organizational dynamics*, 33(4), 393–408. <https://doi:10.1016/j.orgdyn.2004.09.006>.

Wang, Y., Liu, J., & Zhu, Y. (2018). How does humble leadership promote follower creativity? The roles of psychological capital and growth need strength. *Leadership & Organization Development Journal*, 39(4), 507–521.

<https://doi.org/10.1108/LODJ-03-2017-0069>.

Zaccaro, S. J., Rittman, A. L., & Marks, M. A. (2001). Team leadership. *The Leadership Quarterly*, 12 (4), 451–483. [https://doi.org/10.1016/S1048-9843\(01\)00093-5](https://doi.org/10.1016/S1048-9843(01)00093-5)

Zhou, F., & Wu, Y. J. (2018). How humble leadership fosters employee innovation behavior: A two-way perspective on the leader employee interaction. *Leadership & Organization Development Journal*, 39(3), 375-387. <https://doi.org/10.1108/LODJ-07-2017-0181>