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Personality and Individual Differences

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Review

Leader expressed humility: A meta-analysis and an agenda for future research

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ARTICLE INFO

Keywords: leader humility leadership meta-analysis national culture

ABSTRACT

This study meta-analyzes the empirical evidence on the topic of leader humility. Our findings suggest that leader humility makes unique contributions to explaining key followers' outcomes beyond those provided by transformational leadership. We also find significant overlap between leader humility and authentic leadership, yet leader humility has incremental validity in predicting several outcomes. We analyze two theoretically driven moderators: individualism vs. collectivism, and high- vs. low- religiosity, and find that both emerge as moderating the relationships between leader humility and several outcomes. These findings suggest that when constructs such as leader-expressed humility, dispositional humility, honesty-humility, and humility as a component of servant leadership are conflated under the expression "leader humility", the granularities inherent to each one of these constructs are hidden, with negative consequences for the validity of the empirical landscape. We conclude with theoretical implications of our meta-analysis for the leader humility literature and make suggestions for future research.

Over the last two decades, leader humility has received a lot of attention in organizational research. Theoretical and empirical evidence has proliferated, and empirical evidence suggests that leader humility can positively impact not only followers' outcomes, at both the individual and team/organizational levels, but also the leader him/herself (Kelemen et al., 2023; Nielsen & Marrone, 2018). Humility has been proposed as a component of good leadership (Newstead et al., 2021) associated with an openness to learning (Owens & Hekman, 2012) and an antidote to both hubris (Sadler-Smith & Cojuharenco, 2021) and "heroic" leadership models that disempower followers and legitimize the concentration of power in the leadership role (Tourish et al., 2010). Leader humility has also been considered an "important virtue" that contributes to the "manager's moral and professional quality and the development of the company's human team" (Argandoña, 2015: 63). In contrast, unhumble and arrogant leaders have been at the forefront of acquisition mistakes and organizational wrongdoings (Kelemen et al., 2023) and other behaviors detrimental to both internal and external stakeholders (Aguinis et al., 2022).

On the other hand, however, several researchers have pointed out that leader humility is a double-edged sword, in that humble leaders may produce both positive and negative outcomes, depending on boundary conditions and the nature of outcomes studied (e.g., Hu et al., 2018; Qin et al., 2020; Zapata & Hayes-Jones, 2019). For example, Zapata and Hayes-Jones (2019) found that the positive effect of leader humility on leader effectiveness via the employees' attributions to the humble leader of more communal characteristics may be somewhat suppressed by employees' attributions to that leader of less agentic characteristics. This pattern (like other evidence suggesting that humility in leaders has not always produced a positive effect) represents a kind of "conundrum," which resolution would require further research. While our aim is not to provide such a resolution, we aim to metaanalyze data in order to understand if, overall, there are reasons that support defending humility in leaders as a potential enhancer of positive employees and group outcomes. The fact that humility may produce

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negative outcomes in some conditions or contexts can be instructive for leaders who wish to practice and express humility. What is necessary, for both research and practical reasons, is to identify the overall impact of leader humility in their employees and groups – and, if that impact is found to be generally positive (as we hypothesize in this research, for reasons discussed below), it is beneficial to continue to investigate boundary conditions that help leaders enhance the potential benefits of humility and weaken its potential disadvantages. All virtues (including, e.g., forgiveness, love, curiosity, prudence, and courage) have potential negative consequences in some contexts and circumstances (Peterson & Seligman, 2004), yet continue to enhance human and social flourishing, including in organizations.

It is also important to note that, while some ancient philosophers (e. g., Hume, 1912/1777), modern scholars (e.g., Pfeffer, 2015), and practitioners (e.g., Johnson, 2014) are skeptical about the alleged merits of leader humility, such skepticism results from one or more of three primary sources. First, some authors who emphasize cases of unhumble effective and successful leaders downplay the positive role of leader humility (and rationalize defending low humility in leaders), yet do not consider cases of humble leaders who are effective and successful. Second, some authors equate leader effectiveness with personal success or celebrity, underestimating the negative effects that some of those "successful" leaders generate in their employees and organizational health and sustainability (Cunha et al., 2024). Third, some authors tend to conceptualize humility as self-deprecation, low opinion of oneself and lack of ambition. Those conceptualizations and the respective constructs are not consistent with those that have been developed and operationalized in the last years in the organizational and leadership domains (see, e.g., Chandler et al., 2023; Kelemen et al., 2023; Ou et al., 2014, 2018; Owens et al., 2013). Most of these studies led to "the broad consensus (...) that leader humility is fundamentally good" (Zapata & Hayes-Jones, 2019, p. 47).

Therefore, with more than a decade worth of empirical evidence on leader humility, it is necessary to evaluate the advancements made, identify the overall empirical pattern of leader humility outcomes, and make recommendations for future research (Dulebohn et al., 2012). A meta-analysis is a valuable methodology to pursue that endeavor in that meta-analyses highlight broader trends and patterns that individual studies might miss (Schmidt, 2013). As "there are no perfect studies" and "the traditional approach to data analysis makes it virtually impossible to reach correct conclusions in most research areas," the best way to obtain "correct conclusions about the real meaning of research literatures" is a meta-analysis (Schmidt, 2013, p. 573, p. 575). Such an endeavor faces several challenges however, one of the most significant being that humility has been conceptualized and operationalized by (modern) organizational and leadership scholars in different ways. As meta-analyses require comparing data from a similar construct or condition, such a plurality makes comparisons between findings difficult and weakens the validity of the empirical pattern that might emerge. Considering that Owens et al. (2013) provide the most common conceptualization and operationalization of leader humility (Kelemen et al., 2023), we adopt such a conceptualization and define leader humility¹ as "an interpersonal characteristic that emerges in social contexts that connotes (a) a willingness to view oneself accurately, (b) a displayed appreciation of others' strengths and contributions, and (c) teachability." (Owens et al., 2013: 1518). Aligning a meta-analysis with this conceptualization enables to circumventing one the most validity threats to meta-analyses – mixing "apples and oranges" (i.e., constructs with the same names but different operationalizations) - and increases the validity of our results (Sharpe, 1997; Taras et al., 2010).

It is also important to make sense of boundary conditions driving the

heterogeneity in effect sizes across studies. In this meta-analysis, we test two theoretically driven moderators that might influence the relationships between leader humility and its correlates and outcomes: individualism vs. collectivism and high- vs. low- religiosity. These specific moderators were selected for the following reasons. First, as collectivistic cultures prioritize the importance of community, relationships, and the group's welfare and success even, if necessary, at the expense of selfinterests (Chandler et al., 2023; Lin et al., 2024), humble leaders in such cultures are likely to prioritize other organizational members over themselves. Therefore, it makes sense to consider that followers from collectivistic vs. individualistic cultures may react differently to leader humility. Second, while a previous study found that individualism vs. collectivism does not significantly moderate the relationship between leader humility and almost all outcomes of interest (Chandler et al., 2023), it is possible that such a non-finding results from having included studies that have conceptualized and measured leader humility in different ways (e.g., as leader-expressed humility or dispositional humility). As mentioned above, our study includes only studies adopting the Owens et al. (2013) conceptualization of leader humility. We expect that such a single conceptualization contributes to disambiguating the disconnection between the reasonable expectation that individualismcollectivism is a relevant boundary condition of leader humility and the Chandler et al.'s (2023) findings. Third, considering that humility is "a prominent virtue in most world religions" (Van Tongeren et al., 2018: 174), and religiosity is associated with humility (Aghababaei, 2012; Aghababaei et al., 2016; Exline & Hill, 2012; Silvia et al., 2014), it is surprising that religiosity is missing from studies that have empirically investigated the outcomes of leader humility. For reasons discussed below, we consider that it makes sense to consider that the relationship between leader humility and followers' outcomes is stronger (weaker) in high (low) religiosity cultures. Such a meta-analytical endeavor may also contribute to clarifying the relationship between leader humility and employees and group outcomes.

Our meta-analysis also tests the incremental validity of leader humility over two leadership constructs that, while being different from leader humility, share some commonalities with it (Owens et al., 2011; Rego et al., 2017): authentic leadership and transformational leadership. Authentic leadership is "the moral leadership style most conceptually similar to humble leadership" (Kelemen et al., 2023: 204). Transformational leadership is a core construct in leadership research and predicts several outcomes that leader humility also predicts (Kelemen et al., 2023). Therefore, our meta-analysis allows understanding the added value brought by leader humility to leadership research. Our construct redundancy tests go above and beyond previous studies by comparing leader humility to authentic leadership and predicting a wider set of outcomes to better assess the incremental validity of leader humility. We also make an additional methodological contribution by performing relative weights analyses to better understand the relative importance of leader humility as compared to transformational leadership and authentic leadership in predicting outcomes. As a result, this study helps to gain more insights into the uniqueness and overlap of leader humility with established leadership constructs.

1. A short note about our approach to construct redundancy

Before proceeding, some further clarifications are necessary to make sense of our consideration of transformational leadership and authentic leadership. First, as we will discuss below (subsection "Leader humility and other leadership constructs"), while there is a wide range of possible "neighbors" of (and somewhat redundant constructs with) leader humility, including more controls is not necessarily recommendable and rather may create several problems. Second, performing construct redundancy tests required us to construct meta-analytically derived correlation matrices based on meta-analytic estimates from the present study and previous meta-analyses. Although we are able to compare leader humility with two overlapping leadership constructs in predicting

¹ Owens and colleagues have used both the terms "leader-expressed humility" (Owens et al., 2013) and "leader humility" (Owens & Hekman, 2016). Here we adopt the latter, the most "parsimonious" one.

a series of individual-level outcomes, we can only perform such a comparison in predicting just one unit-level outcome, which is unit-level performance, due to a lack of unit-level meta-analytic estimates from previous meta-analyses. This practice to conduct construct redundancy tests based on the availability of meta-analytic estimates is consistent with previous meta-analyses (e.g., Banks et al., 2016).

In addition, we wish we could extend our construct redundancy tests to more leadership constructs overlapping with leader humility, such as servant leadership and ethical leadership. Nevertheless, such analytic efforts are prevented by the fact that there is a dearth of studies providing relevant correlation coefficients. For example, servant leadership shares several commonalities with leader humility (e.g., humility is a component of some conceptualizations and operationalization of servant leadership, e.g., Van Dierendonck, 2011). However, multidimensional servant leadership has not been included as a control in empirical studies about the outcomes of leader humility as conceptualized and operationalized by Owens et al. (2013); note that Krumrei-Mancuso & Rowatt, 2023 related intellectual humility, rather than leader humility as operationalized by Owens et al., 2013, with a single dimension of servant leadership, i.e., altruistic calling).

Leader humility also shares some similarities with ethical leadership. As Kelemen et al. (2023) argue, humble leadership partially overlaps with the "motivating, encouraging, and empowering" and the "community/people-orientation" dimensions of ethical leadership. However, these authors (p. 205) also stated that "ethical leadership has the least amount of theoretical overlap with humble leadership." This evidence may explain, at least partially, why very few studies have included ethical leadership as a control in empirical studies about the outcomes of leader humility (for an exception, see Owens et al., 2019, although the main predictor in this research is leader moral humility – while ethical leadership and leader-expressed humility are controls).

2. Theory and hypotheses

2.1. Theoretical foundations of leader humility

Humility is a temperance virtue representing a proper prospective of oneself and guarding the self against excess (Greenberg, 2005). Being humble means possessing a grounded view of oneself and others and accepting that one is not the "center of the universe" (Ou et al., 2014: 37). Humble leaders view themselves in an objective and others in an appreciative way, and thus are receptive to new information or ideas from others (Owens & Hekman, 2012). Organizational behavior scholarship by and large focuses on leader humble behaviors as perceived by followers. Such a construct, often named as "leader-expressed humility" (e.g., Kelemen et al., 2023; Owens et al., 2013; Rego et al., 2021) is consistent with leadership as "a process that is co-created in social and relational interactions" between leaders and followers (Uhl-Bien et al., 2014: 83). Therefore, by following Owens et al. (2013), we define leader (expressed) humility as an interpersonal characteristic that emerges in social interactions and consists of (a) a manifested willingness to view oneself accurately; (b) a displayed appreciation of others' strength and contributions; and (c) teachability, or receptiveness to new ideas, feedback, and advice.

Humble leader behaviors help followers embrace uncertainty at work and consider involvement in a developmental path as legitimate. Leader humility helps both leaders and their followers to learn continuously and to make more grounded decisions that contribute to effective organizational functioning. For this and several other reasons (see Kelemen et al., 2023 for a review), humble leaders become models of growth for employees, particularly in turbulent environments and in work contexts that call for novel and useful ideas. Consequently, leader humility should positively influence followers and "work units". By

work unit we mean an interdependent group of individuals working toward a shared goal.² In our meta-analysis, we examine individual-level behavioral and attitudinal outcomes of leader humility as well as unit-level behavioral outcomes and emergent states. Furthermore, we examine individual- and unit-level correlates of leader humility. Next, we discuss our hypotheses related to the individual-level outcomes of leader humility, and then discuss hypotheses related to unit-level outcomes. Later, we discuss moderators and correlates.

2.2. Leader humility and individual-level behavioral outcomes

Followers of humble leaders feel that they can easily obtain material, informational, and social resources from their leader, which gives them the confidence and capability to deal with the complexity of their tasks and contributes to their job performance (Mao et al., 2019; Owens et al., 2013). Humble leaders also appreciate followers' strengths and recognize the significance of followers' efforts, which creates a feeling of psychological empowerment (more about this below) in followers (Jeung & Yoon, 2016) and thus enhances to their job performance (Maynard et al., 2012). Leader humility also makes followers more engaged in their work (Demerouti et al., 2010; Owens et al., 2013; Owens & Hekman, 2012), engagement being an important predictor of job performance (Dalal et al., 2012). In short, as empowerment and engagement lay the psychological grounds for attaining work-related goals, leader humility should be positively associated with employees' job performance.

Leader humility is also associated with followers' creativity/innovation (Wang et al., 2017) because suggesting and implementing creative solutions to novel and complex issues requires not only experiencing a psychologically safe climate to take risks, but also learning and applying new ways of working. Humble leaders foster employees' psychological safety (more about this below) and focus on the continual development of their followers, which is akin to challenging the status quo and improving followers' circumstances (Wang et al., 2018a, 2018b). The motivational thrust of being recognized and appreciated by leaders also enhances followers' generation of creative ideas. Moreover, as followers mimic humble leaders, they start to view others more appreciatively and take others' perspectives (Wang et al., 2017). Since development of new skills and the consideration of diverse perspectives are associated with the generation and implementation of new ideas (Joshi & Roh, 2009), leader humility should trigger followers' creativity/innovation.

Leader humility is also related to organizational citizenship behaviors (OCBs). Following social cognitive theory, Owens et al. (2019) suggested that followers of humble leaders tend to engage in prosocial behaviors. The reason is that observing the positive outcomes of leader

² Following previous meta-analyses, we use the broad term "unit-level" to refer to aggregates at different levels within a hierarchical structure, in line with previous research (e.g., Whitman et al., 2010). All unit-level outcomes in the present study are at the team-level, with the exception of unit-level performance, which is an aggregate of team-level and firm-level performance (see Figure 1). This aggregation is not only consistent with previous research (e.g., Banks et al., 2016; Judge & Piccolo, 2004; Whitman et al., 2010) but also supported by the result of a sensitivity analysis. First, we calculated, reported, and differentiated effect sizes for team-level and firm-level meta-analytic distributions and found the effect sizes to be nearly identical across these two levels (see Table 1). Second, we performed a subgroup analysis to compare the difference between these two effect sizes to examine whether levels of performance moderate the relationship. We found the difference in effect sizes between team-level performance and firm-level performance to be statistically non-significant, further justifying the appropriateness of aggregation. In light of relatively smaller number of studies at firm-level, this aggregation to form the unit-level performance distribution not only affords higher statistical power to perform further meaningful comparisons but also forms a more robust metaanalytic distribution without changing the empirical patterns of results.

humility makes followers more confident in being involved in actions that benefits others. This confidence in turn regulates and sustains followers' helping behaviors. The relational focus of humble leaders and their acknowledgment of others also enable followers to perceive that team members' goals are valued. A growing sense of shared goals motivates employees to transcend their own goals and improve the colleagues' welfare. Further, a humble leader enables followers to take others' perspectives (Wang et al., 2017) and to feel identified with their workmates (Zheng et al., 2023), thus making followers more prosocially motivated and involved in helping behaviors (Tuan et al., 2021). Humble leaders are a source of resources that make employees more likely to be adaptively proactive in adopting discretionary behaviors in their service delivery (Tuan et al., 2021).

Leader humility also reduces employees' counterproductive work behaviors (CWB) (Wang et al., 2019). Since humble leaders acknowledge followers' strengths and help them develop these strengths, followers reciprocate by engaging in less deviance behaviors (Qin et al., 2020). Moreover, employees are less likely to adopt CWB when they feel they are being fairly treated and view their leaders as trustworthy (Colquitt et al., 2013). Considering that humble leaders foster trustful and fair relationships with followers (Liborius & Kiewitz, 2022; Mishra & Mishra, 2012; Wang, Liu, Hsieh, & Zhang, 2022), followers will reciprocate by adopting less CWB. Additionally, trusting and fair social exchanges between humble leaders and their followers also lead the latter to reciprocate through lower voluntary turnover (Liborius & Kiewitz, 2022; Ou et al., 2017; Owens et al., 2013). Hence:

Hypotheses 1. Leader humility relates positively to employees' job performance (1a), OCB (1b), and creativity/innovation (1c), and negatively to CWB (1d) and turnover (1e).

2.3. Leader humility and individual-level attitudinal outcomes

Individuals feel accomplished when their needs for competency, autonomy, and relatedness are validated (Ryan & Deci, 2000), and leader humility validates these needs. Specifically, humble leaders value their followers' abilities, involve them in decision making, encourage their suggestions, and consider them as their equals (Ou et al., 2017). When followers' self-determination needs are fulfilled, they become more satisfied with their jobs.

Further, social support from humble leaders (Owens et al., 2016; Rego et al., 2022; Wang et al., 2018a) is an important resource for followers and fosters followers' integration of their personal energies at work. As a result, followers invest their entire selves in their work and become more engaged in their jobs (Rich et al., 2010). By acknowledging the strengths and contributions of followers and being teachable, a humble leader also fosters other preconditions for follower engagement, including their sense of dignity, respect, appreciation, and value (Ou et al., 2014; Owens & Hekman, 2012).

Another construct that can be affected by leader humility is followers' organizational identification. Humble leaders do not consider themselves heroes; rather, they attribute their successes to others. In so doing, they draw followers' attention to the organization's goals and values, rather than themselves. Consequently, they make it more likely for their followers to internalize organizational goals and values (Li et al., 2022). In addition, as humble leaders openly display their positive feelings toward their organizations and underscore their organization's strengths, followers develop more faith in the significance and reliability of the organization's goals and values, which positively influences followers' attachment to the organization (Li et al., 2022).

Leader humility is also related to followers' psychological empowerment (Chen et al., 2018). Since humble leaders appreciate their followers' strengths, they create a sense of meaningfulness at work, and such appreciation also augments followers' confidence in their own abilities. Humble leaders are also open to and give leeway to followers'

ideas that might be contradictory to their own and, hence, foster the sense of autonomy. Further, they enable followers to believe that they are making a difference through their work inputs (Jeung & Yoon, 2016). As leader humility enhances feelings of meaning, self-efficacy, autonomy, and impact, it is a source of psychological empowerment for followers.

Leader humility also promotes followers' trust in the leader (as mentioned above; see, e.g., Nguyen et al., 2020). When leaders appreciate their followers' strengths and allow them to feel and act like their true selves, followers perceive a genuine care and concern for their welfare (Liborius & Kiewitz, 2022). Through social learning, the teachability component of humble leaders also conveys to followers the message that is acceptable, and even recommendable, to assume mistakes and failures. As a result, followers develop the sense that it is safe to display vulnerability toward the leader, which is the core essence of trust (Dirks & Ferrin, 2002).

Another outcome of leader humility is a more fruitful leader-member exchange (LMX) (e.g., Wang et al., 2021). LMX is anchored in social exchange theory, wherein perceived mutual benefits are expected in establishing the quality of the relationship (Schriesheim et al., 1999). Treatments from humble leaders (e.g., admitting mistakes, serving as a role model of learning, and recognizing subordinates' contributions) may be seen as special benefits by subordinates; as a result, subordinates develop feelings of obtaining developmental opportunities and being valued and respected by their leaders, thus leading to higher levels of LMX (Qin et al., 2020). In short, leader humility fosters trust, relational transparency, and mutual appreciation (Owens et al., 2013; Owens & Hekman, 2012), resulting in higher levels of LMX.

Finally, turnover intentions can be a function of leader humility. When employees' needs are satisfied and they feel more energized at work as a consequence of working with a humble leader, they develop stronger intentions to stay in their organizations. Another possible explanation is that leader humility fosters followers' trust in leader, which in turn reduces their intentions to leave the organization (Liborius & Kiewitz, 2022). Taken together, we propose:

Hypotheses 2. Leader humility relates positively to subordinates' job satisfaction (2a), job engagement (2b), identification with the organization (2c), psychological empowerment (2d), trust in the leader (2e), LMX (2f), and negatively to turnover intentions (2 g).

2.4. Leader humility and unit-level behavioral outcomes

As followers perceive humble leaders as models for growth, a social contagion process takes place wherein unit members start acknowledging each other's strengths, becoming open to new ideas and listening to feedback from other members (Owens & Hekman, 2016). Making unit member strengths socially salient also yields high levels of unit's psychological capital (Luthans & Youssef-Morgan, 2017; Rego et al., 2017, 2019; developments below). Psychological capital helps unit members identify areas for improvement, strive to contribute more toward the unit's goals, recognize new strategies, and become more effective in allocating tasks across unit members. This promotion focus allows unit members to collectively regulate their behavior to maximize the unit's performance (Owens & Hekman, 2016; Rego et al., 2019). Leaders' humble behaviors also foster an interactive process among unit members toward leading one another to achieve the unit's goals (Chiu et al., 2016). As a consequence of such shared leadership, unit members become more confident in their peers' capabilities and thus put more effort toward achieving the unit's goals, which improves unit performance (Chiu et al., 2016).

Leader humility is also related to unit creativity/innovation. As humble leaders guide unit members to look for limitations in the collective work, develop an awareness to ask for help, and realize the need to search for novel viewpoints, they promote information sharing within the unit and foster unit psychological safety (Hu et al., 2018; Rego et al.,

2021). As a result of creating an environment in which members share information with one another, feel that their contributions are appreciated, and feel safe to take interpersonal risks, to express their true ideas and perspectives, and to assume failures and learn from them, humble leaders also become facilitators of creative ideas within the unit. Within such a supportive and information-sharing climate, unit members expose and are exposed to diverse information and perspectives, thus sparking new insights, and generating creative ideas to deal with challenges and opportunities. Leader humility fosters unit innovation also via reflexivity within the unit (Leblanc et al., 2022) because humble leaders admit mistakes and are open to learning, legitimize reflexivity about the unit's resources, strengths, and limitations (Owens & Hekman, 2012), are more receptive to dissimilar or opposite perspectives, and are more inclined to question the effectiveness of the unit's processes and goals, and hence make adaptations accordingly.

Leader humility is also associated with unit-level OCB due to social exchange (Wang, Liu, Wen, & Xiao, 2022) and social learning (Zhou & Chen, 2024) processes. As humble leaders pay attention to the inputs of unit members, give them the opportunity to solve the unit's problems, and appreciate the strengths of each member, a collective sense of confidence in their abilities, and a motivation to engage in discretionary (e.g., helping) behaviors emerge (Wang et al.; Zhou & Chen, 2024). As unit members become aware of their abilities and mimic the leaders' acceptance of their own abilities and teachability, they become more open to receive and give a helping hand to one another (Owens et al., 2011). Moreover, leader humility triggers job crafting at the unit level, a construct associated with unit members becoming prosocially motivated toward one another (Tuan et al., 2021). Hence:

Hypotheses 3. Leader humility is positively related to unit-level OCB (3a), creativity/innovation (3b), and performance (3c).

2.5. Leader humility and unit-level emergent states

Leader humility also fosters several unit emergent states, which are properties developed during unit interactions and describe unit members' feelings and attitudes (Mathieu et al., 2017). As humble leaders accept their own weaknesses and openly recognize that they do not have all the answers, they convey the message that it is acceptable to take risks, and to assume ignorance and failures. These cues lead unit members to realize that learning through failures and risks is accepted and even promoted (Rego et al., 2021). Humble leaders are also willing to listen and be taught, emphasize their followers' growth, praise followers' contributions, and help unit members speak up about what they value. By observing their leaders as a model that promotes others' ideas, unit members appreciate others' ways of thinking and contributions. All these consequences are indicators of psychological safety which, through social learning and socioemotional contagion processes, becomes a shared property of the unit. As research has demonstrated, leader humility associates positively with psychological safety at the unit level (Hu et al., 2018; Rego et al., 2021; Wang et al., 2018a).

Leader humility is also associated with psychological capital at the unit level. According to social information processing theory, followers' perceptions are shaped by cues from their environment, and those cues in turn shape their work attitudes and behaviors (Salancik & Pfeffer, 1978). Leaders are salient sources of social information, because of their high status and direct and frequent interactions with followers. Humble leaders allow followers to have mastery experiences, make the strengths and contributions of followers salient, and therefore help their unit members collectively become more self-confident. Those leader's behaviors also enrich the unit's hope (i.e., its sense of agency and will-power), and make the unit more adaptive and prepared to resiliently face risks, drawbacks, and failures. Finally, humble leaders help the unit embrace future uncertainties with positive expectations and optimism. In short, humble leaders foster unit self-efficacy, optimism, hope, and resilience (Rego et al., 2017, 2019). Hence:

Hypotheses 4. Leader humility is positively related to unit-level psychological safety (4a) and psychological capital (4b).

2.6. Leader humility and moderators

Individuals and units are embedded in larger collectives (e.g., countries) characterized by different cultures (Hofstede et al., 2010). Therefore, we posit that the relationships between leader humility and its outcomes are conditional on relevant cultural dimensions or attributes. We propose two moderators: individualism-collectivism, and country-level religiosity.

2.6.1. Individualism-collectivism

In collectivist cultures, people define themselves in relation to others, whereas in individualistic cultures, people define themselves as a separate entity. Being attentive to a group's needs, being dependable, helping one another, and putting emphasis on common goals are desirable attributes in collectivistic cultures. Differently, focusing on one's personal needs and goals, a concern for one's needs over that of the group's, and being independent are core attributes of individualistic cultures (Hofstede et al., 2010; Kim & Markus, 1999). Since humility is significantly grounded in prioritizing others over oneself, the attributes and behaviors that humble leaders display are more relevant in collectivistic cultures. The leader expressions of humility are more likely to activate the employees' collectivistic needs and identities, thus fostering their positive affect, cognition, and motivation (Tett & Guterman, 2000). In these cultures, people and units are therefore more likely to value, to be receptive to and to internalize those attributes and thus respond in more positive ways (Oc et al., 2015). As a result, the impact of leader humility on followers and units is stronger in collectivistic vs. individualistic cultures.

2.6.2. Country-level religiosity

Exline and Geyer (2004) found that positive views of humility are associated with religiosity, and other researchers have found that religiosity is associated with humility (Aghababaei, 2012; Silvia et al., 2014). A belief that something greater than the self exists is one of the main theoretical foundations of leader humility (Ou et al., 2014), and humility is a foundational virtue and guiding principle for several religions (Davis et al., 2017; Van Tongeren et al., 2018). Therefore, social entities that embrace religious beliefs would be more receptive to behavioral manifestations of humility. Those manifestations are more likely to activate the religious beliefs of those social entities, thus fostering their positive affect, cognition, and motivation. Individuals and social units operating in high- vs. low-religiosity cultures would be more appreciative of humble leader behaviors, and their attitudes and behaviors may be more influenced by such behaviors. Hence:

Hypotheses 5 and 6. Leader humility is more strongly related to its outcomes in collectivistic vs. individualistic cultures (H5) and in high-vs. low-religiosity cultures (H6).

2.7. Leader humility and other leadership constructs

Several constructs are related to, although conceptually and empirically different from, leader humility. However, there is no consensus about which humility's nomological "neighbors" should be controlled for in empirical research. Different researchers, including those who carry out meta-analyses (Chandler et al., 2023) and literature reviews about leader humility (Kelemen et al., 2023), resort to different sets of neighbors and controls for investigating the unique effects of leader humility. A possible explanation for this lack of consensus is that there is a wide range of possible "neighbors" (e.g., narcissism; modesty; servant leadership; authentic leadership; ethical leadership; core self-evaluation; empowering leadership; self-awareness; see, e.g., Chandler et al., 2023; Chon & Sitkin, 2021; Kelemen et al., 2023; Lin et al., 2024;

Nielsen & Marrone, 2018; Ou et al., 2014; Owens & Hekman, 2012; Rego et al., 2017), and scholars select a short number because both practical reasons and the parsimony principle. Moreover, including controls causes several problems (e.g., controls may partially or entirely eliminate the very effects the researchers aim to study; Spector & Brannick, 2011), and those problems may increase as the number of controls also increases (Becker, 2005). In this meta-analysis, we include two leadership constructs that share several commonalities with leader humility: authentic leadership and transformational leadership.

Authentic leadership is defined "as a process that draws from both positive psychological capacities and a highly developed organizational context, which results in both greater self-awareness and self-regulated positive behaviors on the part of leaders and associates, fostering positive self-development." (Luthans & Avolio, 2003: 243). The construct (involving the components of self-awareness, internalized moral perspective, relational transparency, and balanced processing) shares several commonalities with humility (Gardner et al., 2011; Rego et al., 2017) but also important differences. While humility is rooted in selftranscendence, authentic leadership is rooted in self-clarification and genuine self-expression. Moreover, humility does not capture the components of relational transparency and internalized moral perspective that characterize authentic leadership, and authentic leadership does not capture the appreciation of others' humility dimension. In addition, a leader may be "authentically arrogant" (Owens & Hekman, 2012: 798; Rego et al., 2022). Despite these differences, authentic leadership is the construct "most conceptually similar to humble leadership" (Kelemen et al., 2023: 204). However, the construct was not included in previous studies (e.g., Chandler et al., 2023).

Transformational leadership "occurs when leaders broaden and elevate the interests of their employees, when they generate awareness and acceptance of the purposes and mission of the group, and when they inspire their employees to look beyond their own self-interest for the good of the group" (Bass, 1990: 21). Idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration are four foundational components of this type of leadership (Avolio & Bass, 2002). Leader humility and transformational leadership share some similarities, yet are conceptually and empirically distinct. For example, although a humble leader acknowledges and spotlights followers' unique strengths and contributions, which represent a form of individualized consideration, and though modeling teachability may be intellectually stimulating for followers, humble leadership does not capture inspirational motivation nor traditional idealized or charismatic influence (Rego et al., 2017). The inclusion of transformational leadership in studies investigating the outcomes of leader humility makes sense. First, as mentioned, there are some conceptual similarities between the two constructs. Second, transformational leadership is at the center of leadership research (Zhu et al., 2019) and predicts several outcomes that leader humility also predicts (Kelemen et al., 2023). Schaubroeck, Lam, and Peng (2011: 869) stated that transformational leadership "is arguably the most reliable and potent mainstream leadership behavior variable for predicting team performance." Hence:

Hypotheses 7. Leader humility is positively related to transformational leadership (7a) and authentic leadership (7b).

Hypotheses 8. When controlling for transformational leadership, leader humility will contribute incremental validity and relative importance for predicting individual-level (subordinates' job performance, OCB, CWB, creativity/innovation, job satisfaction, job engagement, turnover intentions, trust in leader, and psychological empowerment) and unit-level outcomes (unit-level performance).

Hypotheses 9. When controlling for authentic leadership, leader humility will contribute incremental validity and relative importance for

predicting individual-level (subordinates' job performance, OCB, CWB, creativity/innovation, job satisfaction, job engagement, turnover intentions, trust in leader, and psychological empowerment) and unit-level outcomes (unit-level performance).

2.8. Correlates of leader humility

Demographic variables such as gender, age, educational level, tenure, and length of work experience might influence how followers perceive their organizational environment. For this reason, demographic variables can impact follower's perceptions of leader humility as well as how they respond to leader humility. Demographics may also affect the level of humility expressed by leaders. For example, because females vs. males tend to be more communal (Badura et al., 2018), female leaders tend to express higher levels of humility (Furnham et al., 2002; Owens et al., 2013), and female vs. male followers react more positively to leader humility. Moreover, as individuals age and their life-time horizon shrinks, they become more communal, and this may also affect how humble they are and how they react to leader humility (Carstensen et al., 2003; Kelemen et al., 2023). There are also reasons to believe that humility might develop with accrued life and work experience (Owens et al., 2013). Experiencing failures, something more likely as you progress in your career, may lead individuals to display more humility and value leader humility more (Kelemen et al., 2023; Owens & Hekman, 2012). Subordinate-leader relationship tenure may also affect leader-member exchanges (Maslyn & Uhl-Bien, 2001) and thus influence how leaders behave toward subordinates, and how subordinates react to leader humility. Unit size may have a confounding effect by influencing team functioning and team outcomes, such as intraunit communication, knowledge sharing within the unit, and unit creativity/innovation and performance (see, e.g., Hu et al., 2018; Leblanc et al., 2022; Ou et al., 2018). Due to the exploratory nature of the above proposed correlates, and because literature is inconsistent about the relationship between demographics and leader humility, we offer the next research questions rather than directional hypotheses:

Research question 1. Is leader humility related to subordinates' gender (RQ1a), age (RQ1b), educational level (RQ1c), length of work experience (RQ1d), unit tenure (RQ1e), organizational tenure (RQ1f), and subordinate-leader relationship tenure (RQ1g)?

Research question 2. Is leader humility related to leaders' gender (RQ2a), age (RQ2b), educational level (RQ2c), length of work experience (RQ2d), unit tenure (RQ2e), and organizational tenure (RQ2f)?

Research question 3. Is leader humility related to unit size (RQ3a) and unit mean tenure (RQ3b)?

We present our model in Fig. 1, in which hypotheses and research questions are also presented for the clarity of reporting and presentation.

3. Method

3.1. Literature search and screening

We used previous meta-analyses from the field of leadership to guide the development of our study's meta-analytic setup (e.g., Dulebohn et al., 2012). First, we searched a set of electronic databases, such as ABI/INFORM, EBSCO, APA PsycNET, ScienceDirect, and Web of Science. Second, we searched a list of journals, such as Academy of Management Journal, Administrative Science Quarterly, Journal of Applied Psychology, Journal of Business Ethics, Journal of Management, Journal of Management Studies, Journal of Organizational Behavior, Journal of Personality and Social Psychology, The Leadership Quarterly, Organizational Behavior and Human Decision Processes, Organization Science, Personnel Psychology, and

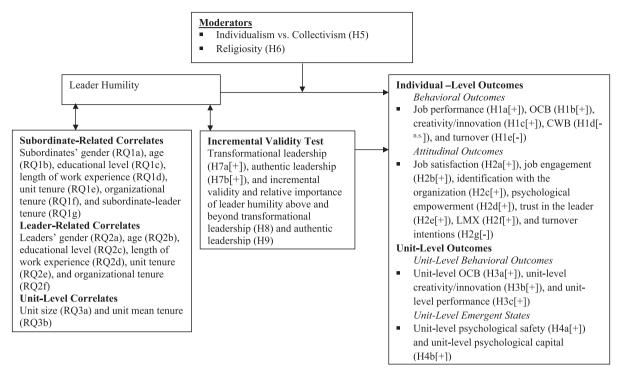


Fig. 1. The correlates, outcomes, and moderators of leader humility.

Note: OCB = organizational citizenship behavior; CWB = counterproductive work behavior; LMX = leader-member exchange; RQ = research question; H = hypothesis. The positive and negative signs inside the bracket next to each hypothesis indicate the hypothesized direction of each hypothesis. The superscript "n.s." inside the bracket demonstrates that the effect size is not statistically significant (the absence of the sign "n.s." means a statistically significant effect size [i.e., a supported hypothesis]).

Psychological Science. Third, we also searched conference papers and Google Scholar to ensure the comprehensiveness of the literature search.

We developed the following inclusion criteria to winnow the studies which were identified during the initial article search. First, only empirical quantitative studies were considered. Second, we only considered the studies on leader-expressed humility construct based on Owens et al. (2013). Our criterion ensures that the findings from different studies are comparable; hence, the construct validity and robustness of meta-analytic results can be ensured. Third, a study had to at least report either a correlation coefficient relevant to our study or enough statistics that can be converted into effect sizes. Lipsey and Wilson's (2001) methods were used to convert relevant statistics into effect sizes. The application of these criteria led to 99 usable samples which contain 399 effect sizes. The references for the included studies are in the supplementary materials.

3.2. Coding procedures

The variables of our study were coded according to the conceptual model in Fig. 1. The first moderator (i.e., individualism-collectivism) was coded according to Hofstede's cultural framework (Hofstede et al., 2010), which has been widely used in previous cross-cultural studies (e.

g., Choi et al., 2015). The robustness and validity of this cultural framework has been confirmed by meta-analytic findings (e.g., Hofstede, 1994; Taras et al., 2010). This cultural framework is theory-driven and provides a set of cultural scores that allows categorizing each country into low vs. high level of a cultural dimension (Taras et al., 2012). The data for the second moderator (i.e., religiosity) were obtained from the WIN-Gallup International Global Index of Religiosity and Atheism. This data source, utilized and recommended by previous research (Woodside et al., 2016), is of high creditability and precision: the respective poll was conducted by the largest and oldest network of opinion pollsters affiliated with WIN-Gallup International (Woodside et al., 2016). The percentage of the population who depict themselves as "a religious person" is computed to create this religiosity index.

3.3. Meta-analytic procedures

The psychometric meta-analysis was conducted to aggregate the research findings (Schmidt & Hunter, 2015). Measurement errors were corrected for both independent and dependent variables for each individual correlation. For unit-level constructs, ICC2 was used to correct for the unreliability in line with previous research (e.g., Wang et al., 2014). Both uncorrected sample-size-weighted mean correlation (r) and corrected sample-size-weighted mean correlation (ρ) were computed. The statistical significance of effect sizes was determined by corrected 95 % confidence intervals. An effect size is considered to be statistically significant when the corrected 95 % confidence interval does not include zero. Var_{art}% and 80 % credibility intervals were computed to assess the possible presence of moderators. Moderators may operate in a metaanalytic distribution when statistical artifacts explain less than 75 % of effect sizes' variance (i.e., $Var_{art}\% < 75$ %) or when 80 % credibility interval is wide. Subgroup analysis was used to test moderator effects because this test has higher statistical power than other meta-analytic moderator tests (Wang et al., 2011). For the meaningfulness of comparison and interpretability of results, moderator analyses were only

³ To enhance the thoroughness of our search process, we considered any studies during the initial article search process as long as the studies investigated leader humility; then, by following our inclusion criteria, we further screened the articles based on leader-expressed humility and its relationships with other variables as displayed in Figure 1 which included not only outcome variables and correlates but also transformational leadership and authentic leadership.

⁴ The samples which were included in our study covered the professionals from various industries, such as financial, IT, manufacturing, health care, and hospitality industries, etc.

conducted on the meta-analytic distributions where there are at least two samples in each level of a moderator. Therefore, the division into different subgroups cannot be applied to all meta-analytic distributions in accordance with the moderators which we postulated.

3.4. Hierarchical multiple regression analyses and relative weights analyses

We also conducted both hierarchical multiple regression analyses and relative weights analyses to assess the incremental validity and relative importance of leader humility in comparison to transformational leadership and authentic leadership (Johnson & LeBreton, 2004; Tonidandel & LeBreton, 2015). Although hierarchical multiple regression analysis can evaluate incremental validity, and beta weights obtained from this analysis can be compared in terms of rank-order, this analysis cannot assess each predictor's relative importance (Johnson & LeBreton, 2004). Thus, using beta weights or zero-order correlations may produce misleading information regarding the relative importance of each predictor when there is multicollinearity in a model. Relative weights analysis was thus performed, enabling us to obtain more precise relative weights of predictors of a dependent variable in a multivariate model having correlated predictors (Johnson & LeBreton, 2004).

To perform these analyses, meta-analytically derived correlation matrices were constructed, the correlation coefficients coming from both the present study and previous meta-analysis studies. The data for the relationships between leader humility and outcome variables, between leader humility and transformational leadership, and between leader humility and authentic leadership came from the present study. The data for the relationships between transformational leadership and outcome variables and between authentic leadership and outcome variables were based on previous meta-analysis studies (e.g., Banks et al., 2016; Hoch et al., 2018; Judge & Piccolo, 2004; Wang et al., 2011).

4. Results

4.1. Leader humility and its correlates and outcomes

The meta-analytic results are displayed in Table 1 (for the clarity and parsimony of reporting, Table 2 is also presented). Leader humility is positively associated with job performance ($\rho^{\hat{}} = 0.29$) because the 95 % confidence interval excluded zero (95 % CI = [0.19, 0.39]). H1a is therefore supported. The corrected 95 % confidence intervals for OCB $(\rho^{\hat{}} = 0.34)$, creativity $(\rho^{\hat{}} = 0.29)$, and turnover $(\rho^{\hat{}} = -0.13)$ exclude zero, thus supporting H1b, H1c, and H1e. Nevertheless, the 95 % confidence interval for CWB ($\rho^{-} = -0.04$) includes zero; thus, H1d is not supported. With respect to correlates, RQ1 explores whether leader humility is related to subordinates' demographic correlates. Leader humility is not significantly associated with any one of these subordinates' demographic variables. Identical procedures were used to meta-analyze all other outcomes and correlates. Leader humility relates positively to subordinates' job satisfaction (H2a), job engagement (H2b), identification with the organization (H2c), psychological empowerment (H2d), trust in the leader (H2e), and LMX (H2f), and negatively to turnover intentions (H2g). Therefore, hypotheses H2a to H2g are supported. Leader humility positively relates to unit-level OCB (H3a), creativity/ innovation (H3b), performance (H3c), psychological safety (H4a), and psychological capital (H4b), thus supporting H3a, H3b, H3c, H4a, and H4b.

4.2. Moderating effects

The relationships between leader humility and (i) job performance, (ii) individual OCB, and (iii) trust in leader are stronger in individualistic vs. collectivistic cultures. This finding contradicts our hypothesis (H5) that posited that those relationships would be stronger in collectivistic vs. individualistic cultures. Moreover, the relationships between leader

humility and (i) job engagement and (ii) unit-level performance do not significantly differ for individualistic vs. collectivistic cultures, a finding that does not support H5. Leader humility has a stronger relationship with job performance and trust in leader in high- vs. low-religiosity countries. However, leader humility is more strongly related to job engagement, psychological empowerment, and unit-level performance in low- vs. high-religiosity countries, whereas the relationships between leader humility and (i) individual OCB and (ii) individual creativity/innovation do not significantly vary between low- vs. high-religiosity countries. Thus, H6 receives support for some outcomes but not for others.

4.3. Incremental validity analyses and relative weights analyses

The bivariate results demonstrate a strong overlap between leader humility and authentic leadership (a corrected correlation of 0.63 which is greater than the benchmark of a large correlation of 0.50 [Cohen, 1988]) and a noticeable overlap between leader humility and transformational leadership (a corrected correlation of 0.40 which is close to the benchmark of a large correlation). We performed incremental validity analyses (transformational/authentic leadership entered first in the regression analysis, and then entered leader humility) and relative weights analyses to evaluate the degree of construct redundancy between these constructs (Tables 3 and 4). While the incremental validities contributed by leader humility are statistically significant in nine out of ten cases (see the statistical significance of ΔR^2 values in Table 3), the practical significance of the incremental validity is not quite noticeable, with five out of ten cases having ΔR^2 values <0.08 ($\Delta R^2 = 0.039$ for predicting job performance; 0.062 for individual OCB; 0.003 for CWB; 0.111 for individual creativity/innovation; 0.084 for unit-level performance; 0.131 for job satisfaction; 0.023 for job engagement; 0.079 for turnover intention; 0.146 for trust in leader; 0.050 for psychological empowerment).

Relative weights analyses were also performed (RW and RW% in Table 3). Leader humility vs. transformational leadership has greater relative importance in six out of ten cases – job performance (55.0 % vs. 45.0 %), individual OCB (63.3 % vs. 36.7 %), CWB (4.3 % vs. 95.7 %), individual creativity/innovation (84.7 % vs. 15.3 %), unit-level performance (72.8 % vs. 27.2 %), job satisfaction (62.0 % vs. 38.0 %), job engagement (26.0 % vs. 74.0 %), turnover intention (64.5 % vs. 35.5 %), trust in leader (45.6 % vs. 54.4 %), and psychological empowerment (39.9 % vs. 60.1 %). Hence, H8, while not supported for some outcomes, is supported for others.

We also analyzed the incremental validities and relative weights of leader humility relative to authentic leadership (Table 4). Although the incremental validities contributed by leader humility after accounting for the effect of authentic leadership are statistically significant in all of the ten cases, the practical significance of these incremental validities is not noticeable with nine out of ten cases, having ΔR^2 values $<0.08~(\Delta R^2=0.068~for~predicting~job~performance;~0.002~for~individual~OCB;~0.040~for~CWB;~0.055~for~individual~creativity/innovation;~0.023~for~unit-level~performance;~0.046~for~job~satisfaction;~0.016~for~job~engagement;~0.102~for~turnover~intention;~0.067~for~trust~in~leader;~0.006~for~psychological~empowerment). Relative~to~the~previous~comparison~between~leader~humility~and~transformational~leadership,~leader~humility~demonstrates~more~limited~practical~significance~of~incremental~validities~(as~controlled~for~authentic~leadership)~in~predicting~outcome~variables.$

As for the results of relative weights analyses, leader humility only exhibits greater relative importance than authentic leadership in three out of ten outcomes – job performance (87.0 % vs. 13.0 %), individual OCB (25.3 % vs. 74.7 %), individual CWB (15.3 % vs. 84.7 %), individual creativity/innovation (63.2 % vs. 36.8 %), unit-level performance (43.7 % vs. 56.3 %), job satisfaction (45.3 % vs. 54.7 %), job engagement (40.8 % vs. 59.2 %), turnover intention (84.4 % vs. 15.6 %), trust in leader (44.8 % vs. 55.2 %), and psychological empowerment (28.2 % vs. 71.8 %). In conclusion, although there is some evidence in

Table 1
Meta-analytic results of the correlates, outcomes, and moderators of leader humility.

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eaders' Gender eaders' Age eaders' Educational Level eaders' Work Experience eaders' Unit Tenure eaders' Organizational Tenure eader Humility – Unit-Level Correlates eader Humility - Unit Size eader Humility - Unit Mean Tenure	22 16 2 5 16	2771 1746 200 502 2152	-0.01 0.05 0.15 -0.03	0.15 0.19 0.05	-0.01	0.12		0.05	-0.14	0.14	33 %	
eaders' Age eaders' Educational Level eaders' Work Experience eaders' Unit Tenure eaders' Organizational Tenure eader Humility – Unit-Level Correlates eader Humility - Unit Size eader Humility - Unit Mean Tenure	22 16 2 5 16	2771 1746 200 502 2152	-0.01 0.05 0.15 -0.03	0.15 0.19 0.05	-0.01	0.12		0.05	-0.14	0.14	33 %	
eaders' Educational Level eaders' Work Experience eaders' Unit Tenure eaders' Organizational Tenure eader Humility – Unit-Level Correlates eader Humility - Unit Size eader Humility - Unit Mean Tenure	16 2 5 16	1746 200 502 2152	0.05 0.15 -0.03	0.19 0.05			0.07					
eaders' Work Experience eaders' Unit Tenure eaders' Organizational Tenure eader Humility – Unit-Level Correlates eader Humility - Unit Size eader Humility - Unit Mean Tenure eader Humility – Individual Behavioral Outcome	2 5 16	200 502 2152	$0.15 \\ -0.03$	0.05	0.06		-0.07	0.05	-0.17	0.15	37 %	
eaders' Unit Tenure eaders' Organizational Tenure eader Humility – Unit-Level Correlates eader Humility - Unit Size eader Humility - Unit Mean Tenure eader Humility – Individual Behavioral Outcomes	5 16 19	502 2152	-0.03			0.16	-0.03	0.15	-0.15	0.27	27 %	
eaders' Organizational Tenure eader Humility – Unit-Level Correlates eader Humility - Unit Size eader Humility - Unit Mean Tenure eader Humility – Individual Behavioral Outcomes	16 19	2152		0.08	0.15	0.00	0.01	0.29	0.15	0.15	100 %	
eaders' Organizational Tenure eader Humility – Unit-Level Correlates eader Humility - Unit Size eader Humility - Unit Mean Tenure eader Humility – Individual Behavioral Outcomes	16 19	2152			-0.03	0.00	-0.12	0.06	-0.03	-0.03	100 %	
eader Humility - Unit Size eader Humility - Unit Mean Tenure eader Humility – Individual Behavioral Outcome				0.12	-0.01	0.08	-0.07	0.05	-0.11	0.10	55 %	
eader Humility - Unit Size eader Humility - Unit Mean Tenure eader Humility – Individual Behavioral Outcome												
eader Humility - Unit Mean Tenure eader Humility – Individual Behavioral Outcomes		2812	0.01	0.12	0.02	0.11	-0.05	0.08	-0.12	0.16	45 %	
eader Humility – Individual Behavioral Outcome:	ь											
-		431	0.05	0.22	0.04	0.22	-0.16	0.25	-0.24	0.33	30 %	
· · · · · · · · · · · · · · · · · · ·	s											
	11	2938	0.27	0.15	0.29	0.16	0.19	0.39	0.09	0.50	13 %	
27												
DV Individualism	2	417	0.55	0.15	0.59	0.18	0.34	0.85	0.37	0.82	8 %	b
Collectivism	8	1645	0.22	0.13	0.24	0.10	0.15	0.33	0.10	0.38	31 %	a
Conectivisiii	0	1043	0.22	0.11	0.24	0.11	0.13	0.33	0.10	0.36	31 %	d
eligiosity												
High	2	417	0.55	0.15	0.59	0.18	0.34	0.85	0.37	0.82	8 %	b
Low	8	1645	0.22	0.11	0.24	0.11	0.15	0.33	0.10	0.38	31 %	a
СВ	19	5128	0.31	0.21	0.34	0.23	0.23	0.45	0.05	0.63	7 %	u
OV												
Individualism	4	1313	0.48	0.18	0.52	0.20	0.32	0.72	0.27	0.78	5 %	b
Collectivism	14	3558	0.25	0.20	0.27	0.21	0.16	0.39	0.01	0.54	9 %	a
eligiosity												
High	4	1262	0.42	0.20	0.48	0.21	0.26	0.60	0.20	0.75	5 %	
9	4	1362	0.43					0.69				_
Low	14	3562	0.25	0.20	0.28	0.21	0.16	0.39	0.01	0.55	8 %	-
WB	5	1303	-0.03	0.10	-0.04	0.09	-0.13	0.06	-0.15	0.07	42 %	
reativity/Innovation	15	5315	0.34	0.16	0.39	0.17	0.30	0.48	0.17	0.61	9 %	
eligiosity												
High	3	1085	0.33	0.14	0.39	0.16	0.20	0.58	0.19	0.59	11 %	_
. Low	10	3939	0.35	0.16	0.40	0.18	0.28	0.51	0.16	0.63	7 %	_
urnover	2	861	-0.12	0.03	-0.13	0.00	-0.19	-0.06	-0.13	-0.13	100 %	
eader Humility – Individual Attitudinal Outcome												
ob Satisfaction	3	864	0.44	0.14	0.50	0.15	0.32	0.68	0.31	0.69	11 %	
bb Engagement	8	3044	0.30	0.12	0.33	0.11	0.24	0.41	0.18	0.47	16 %	
OV												
	2	011	0.25	0.00	0.26	0.00	0.20	0.22	0.26	0.26	100.0/	
Individualism	2	844	0.25	0.00	0.26	0.00	0.20	0.33	0.26	0.26	100 %	-
Collectivism	5	1324	0.35	0.17	0.39	0.16	0.24	0.54	0.18	0.60	12 %	_
eligiosity												
High	3	1094	0.23	0.04	0.26	0.00	0.20	0.31	0.26	0.26	100 %	b
Low	4	1074	0.39	0.16	0.42	0.16	0.26	0.59	0.22	0.63	11 %	a
rust in the Leader	9	2342	0.55	0.16	0.61	0.15	0.51	0.71	0.42	0.80	10 %	-
	-				-				-		- · ·	
DV												
Individualism	5	1330	0.62	0.15	0.68	0.14	0.55	0.81	0.49	0.86	8 %	b
Collectivism	3	755	0.44	0.11	0.49	0.09	0.37	0.61	0.37	0.61	28 %	a

(continued on next page)

Table 1 (continued)

	k	N	r^{-}	SD_r	$ ho^{\neg}$	$SD_{ ho}$	CI LL	CI UL	CV LL	CV UL	$Var_{art}\%$	Moderator Effect
Religiosity												
a. High	5	1337	0.64	0.13	0.70	0.11	0.60	0.81	0.56	0.85	11 %	b
b. Low	3	755	0.44	0.11	0.49	0.09	0.37	0.61	0.37	0.61	28 %	a
LMX	7	1414	0.30	0.12	0.32	0.12	0.23	0.42	0.17	0.47	27 %	
Identification with the Organization	3	866	0.47	0.14	0.53	0.13	0.37	0.69	0.36	0.70	13 %	
Psychological Empowerment	4	879	0.34	0.14	0.38	0.15	0.22	0.53	0.19	0.56	17 %	
Religiosity												
a. High	2	631	0.28	0.08	0.30	0.07	0.18	0.42	0.21	0.39	41 %	b
b. Low	2	248	0.50	0.11	0.63	0.00	0.54	0.73	0.63	0.63	100 %	a
Turnover Intention	3	661	-0.34	0.27	-0.38	0.31	-0.74	-0.03	-0.78	0.01	5 %	
Leader Humility - Leadership Styles												
Transformational Leadership	6	608	0.37	0.13	0.40	0.12	0.28	0.51	0.24	0.55	38 %	
Authentic Leadership	4	956	0.54	0.06	0.63	0.08	0.54	0.73	0.53	0.74	29 %	
Leader Humility – Unit-Level Outcomes												
Unit-Level OCB	3	210	0.43	0.10	0.71	0.00	0.60	0.82	0.71	0.71	100 %	
Unit-Level Creativity/Innovation	4	323	0.17	0.16	0.25	0.15	0.04	0.46	0.06	0.44	51 %	
Unit-Level Psychological Safety	6	499	0.41	0.09	0.53	0.15	0.39	0.66	0.34	0.71	41 %	
Unit-Level Psychological Capital	6	375	0.52	0.14	0.66	0.17	0.51	0.82	0.44	0.88	34 %	
Leader Humility - Unit-Level Performance	20	2011	0.31	0.18	0.37	0.19	0.28	0.46	0.13	0.62	24 %	
Level of Units												
a. Team Performance	15	1237	0.30	0.13	0.37	0.12	0.29	0.45	0.22	0.52	53 %	
b. Firm Performance	5	774	0.32	0.25	0.37	0.26	0.13	0.61	0.04	0.71	9 %	
IDV												
a. Individualism	3	234	0.22	0.23	0.20	0.26	-0.12	0.53	-0.13	0.54	17 %	_
b. Collectivism	16	1690	0.33	0.17	0.41	0.16	0.32	0.50	0.21	0.62	31 %	-
Religiosity												
a. High	2	182	0.11	0.09	0.11	0.00	-0.04	0.25	0.11	0.11	100 %	b
b. Low	12	1385	0.37	0.18	0.45	0.18	0.34	0.56	0.22	0.68	23 %	a

Note. k = number of independent samples; N = sample size; r^- = uncorrected sample-size-weighted mean correlation; SD_r = sample-size-weighted standard deviation of observed mean correlations; ρ^- = corrected sample-size-weighted mean correlations; SD_ρ = sample-size-weighted standard deviation of corrected mean correlations; CI LL and CI UL = lower and upper bounds of corrected 95 % confidence interval; CV LL and CV UL = lower and upper bounds of corrected 80 % credibility interval; CV LL and CV UL = lower and upper bounds of corrected 80 % credibility interval; CV LL and CV UL = lower and upper bounds of corrected 80 % credibility interval; CV LL and CV UL = lower and upper bounds of corrected 80 % credibility interval; CV LL and CV UL = lower and upper bounds of corrected 80 % credibility interval; CV LL and CV UL = lower and upper bounds of corrected 80 % credibility interval; CV LL and CV UL = lower and upper bounds of corrected 80 % credibility interval; CV LL and CV UL = lower and upper bounds of corrected 80 % credibility interval; CV LL and CV UL = lower and upper bounds of corrected 80 % credibility interval; CV LL and CV UL = lower and upper bounds of corrected 80 % credibility interval; CV LL and CV UL = lower and upper bounds of corrected 80 % credibility interval; CV LL and CV UL = lower and upper bounds of corrected 80 % credibility interval; CV LL and CV UL = lower and upper bounds of corrected 80 % credibility interval; CV LL and CV UL = lower and upper bounds of corrected 80 % credibility interval; CV LL and CV UL = lower and upper bounds of corrected 80 % credibility interval; CV LL and CV UL = lower and upper bounds of corrected 80 % credibility interval; CV LL and CV UL = lower and upper bounds of corrected 80 % credibility interval; CV LL and CV UL = lower and upper bounds of corrected 80 % credibility interval; CV LL and CV UL = lower and upper bounds of corrected 80 % credibility interval; CV L

terms of statistical significance of incremental validities and some evidence for relative importance of leader humility relative to authentic leadership in predicting outcome variables, the results are mixed with both supportive and unsupportive evidence. Thus, H9 is supported for several outcomes but not for others. Taken altogether, the overlap between leader humility and authentic leadership is greater than that between leader humility and transformational leadership.

5. Discussion

Our findings suggest that leader humility makes a unique contribution to explaining key followers' outcomes beyond those provided by transformational leadership. As Hoch et al. (2018: 503) observed, assessing the incremental validity of each emerging leadership approach (e.g., leader humility) "is important to inform the optimal array of leadership forms and evaluate potential construct redundancy" (see also Newman et al., 2016). On the other hand, there is significant overlap between leader humility and authentic leadership, a finding consistent with Kelemen et al. (2023) who observed that authentic leadership is conceptually similar to humble leadership. This does not mean, however, that leader humility is redundant with authentic leadership and, therefore, not worthy of continued examination. In fact, this meta-analysis suggests that leader humility has incremental validity in predicting several outcomes. Such a finding makes sense because the two constructs differ in ways discussed earlier in this paper. Therefore,

researchers of leader humility may make more valid contributions if they include authentic leadership as a control.

Interestingly, servant leadership, as a multidimensional construct, has not been included for control in studies aimed at investigating the outcomes of leader humility as conceptualized by Owens et al. (2013). This is understandable because while servant leadership shares some similarities with leader humility, key differences exist (Kelemen et al., 2023). On the other hand, however, humility has been suggested as a component of some operationalizations of servant leadership (e.g., van Dierendonck & Nuijten, 2011). Therefore, future studies must investigate the effects of leader humility vs. servant leadership on follower outcomes. Future studies may also explore whether humility should be considered as a component of or, rather, as an antecedent of servant leadership. While the former represents the psychometric approach toward the similarity between constructs (i.e., the correlation between the constructs is rooted in a common underlying construct), the latter represents the causal sequence approach (the correlation is due to one of the narrow constructs causing the other). It is however "difficult if not impossible to empirically determine which of the two approaches is more correct" (Newman et al., 2016: 975).

Another important contribution of this meta-analysis refers to the moderators. Differently from Kelemen et al. (2023), who found that individualism-collectivism doesn't moderate the relationship between leader humility and almost all outcomes of interest, our meta-analytical evidence suggests otherwise: this culture variable moderates the

Table 2 Summary of hypotheses and meta-analyt	ric results.
Hypotheses	Results
H1. Leader humility relates positively to employees' job performance (1a), OCB (1b), and creativity/innovation (1c), and negatively to CWB (1d) and turnover (1e).	H1a, H1b, H1c, and H1e are supported. H1d is not supported.
H2. Leader humility relates positively to subordinates' job satisfaction (2a), job engagement (2b), identification with the organization (2c), psychological empowerment (2d), trust in the leader (2e), LMX (2f), and negatively to turnover intentions (2 g).	H2a, H2b, H2c, H2d, H2e, H2f, and H2g are supported.
H3. Leader humility is positively related to unit-level OCB (3a), creativity/innovation (3b), and performance (3c).	H3a, H3b, and H3c are supported.
H4. Leader humility is positively related to unit-level psychological safety (4a) and psychological capital (4b).	H4a and H4b are supported.
H5 and H6. Leader humility is more strongly related to its outcomes in collectivistic vs. individualistic cultures (H5) and in high- vs. low-religiosity cultures (H6).	Leader humility is more strongly related to job performance, individual OCB, and trust in the leader in individualistic cultures than in collectivistic cultures. The relationships between leader humility and job engagement, and between leader humility and unit-level performance do not differ between

H7. Leader humility is positively related to transformational leadership (7a) and authentic leadership (7b).

H8. When controlling for transformational leadership, leader humility will contribute incremental validity and relative importance for predicting individual-level (subordinates' job performance, OCB, CWB, creativity/ innovation, job satisfaction, job engagement, turnover intentions, trust in leader, and psychological empowerment) and unit-level outcomes (unit-level performance).

H9. When controlling for authentic leadership, leader humility will contribute incremental validity and relative importance for predicting individual-level (subordinates' job performance, OCB, CWB, creativity/ innovation, job satisfaction, job engagement, turnover intentions, trust in leader, and psychological empowerment) and unit-level outcomes (unit-level performance).

Research Question 1: Is leader humility related to subordinates' gender (RQ1a), age (RO1b), educational level (RO1c).

Hypotheses 8, although not supported for some outcomes, are supported for others. Although the incremental validities contributed by leader humility are statistically significant in nine out of ten cases, the practical significance of the incremental validities is not noticeable, with five out of ten cases having ΔR^2 values < 0.08. Leader humility demonstrated greater relative importance than transformational leadership in six out of ten cases.

individualistic vs. collectivistic cultures. H5 is not supported.

Leader humility is more strongly

countries. Nevertheless, leader humility is more strongly related to job

engagement, psychological

empowerment, and unit-level

performance in low- versus high-

religiosity countries. The relationships

between leader humility and individual OCB and individual creativity/

innovation do not differ between low-

versus high-religiosity countries.

H7a and H7b are supported.

related to job performance and trust in

leader in high- versus low-religiosity

Hypotheses 9, while are not supported for some outcomes, are supported for others. Although the incremental validities contributed by leader humility are statistically significant in all of the ten cases, the practical significance of the incremental validities is not noticeable, with nine out of ten cases having ΔR^2 values < 0.08. Leader humility only demonstrated greater relative importance than authentic leadership in three out of ten cases. Leader humility is not significantly related to any one of these subordinates' demographical variables.

Table 2 (continued)

Hypotheses	Results
length of work experience (RQ1d), unit	
tenure (RQ1e), organizational tenure	
(RQ1f), subordinate-leader relationship	
tenure (RQ1g).	
Research Question 2: Is leader humility	Leader humility is not significantly
related to leaders' gender (RQ2a), age	related to any one of these leaders'
(RQ2b), educational level (RQ2c),	demographical variables except for a
length of work experience (RQ2d), unit	significant and positive relationship
tenure (RQ2e), and organizational	with leaders' length of work
tenure (RQ2f).	experience.
Research Question 3: Is leader humility	Leader humility is not significantly
related to unit size (RQ3a) and unit	related to unit size and unit mean
mean tenure (RQ3b)?	tenure.

Note: OCB = organizational citizenship behavior; CWB = counterproductive work behavior; LMX = leader-member exchange; H = hypothesis; RQ = research question. The cross-cultural and country-level religiosity moderator analyses were only performed on the meta-analytic distributions where there are at least two samples in each level of a moderator.

relationship between leader humility and several outcomes, although in the opposite direction of what we have hypothesized (H5: the relationship between leader humility and the outcomes are stronger in collectivistic vs. individualistic cultures; see Table 2). Several interrelated explanations for this unexpected result are plausible. First, employees from individualistic cultures may consider that their individualistic needs, goals, and identity are met by a humble leader who listens to them, acknowledges their individual contributions, and is willing to learn from their ideas and contributions. Such a perception leads them to react to a humble leader more positively than followers from collectivistic cultures do. Second, since the propensity to trust levels are lower in individualistic cultures, the role of humble leaders in establishing trust can be more salient than in collectivistic cultures (Westjohn et al., 2022). Similarly, the tendency to emphasize group welfare in collectivistic cultures likely makes involvement in citizenship behaviors already a norm, which may render leader humility less relevant in influencing OCB in such cultures.

Third, literature shows a strong negative correlation between individualism and power distance (r = -0.77, p < .01; -0.47, p < .01, if GLOBE power distance is considered: Euwema et al., 2007), and a positive correlation between individualism and egalitarianism (r = 0.51, p< .05, Schwartz, 1994). Therefore, followers from individualistic, lowpower distance and egalitarian cultures appreciate a humble leader who treats them as equals and develop "closer" and more "participative" relationships with them - and react more negatively to a unhumble leader. Differently, individuals from collectivistic, high-power distance and non-egalitarian cultures, who value social hierarchy, feel less discomfort in dealing with an unhumble leader who does not listen to them and rather adopts a more "authoritarian" stance. A third possible explanation is that we treated individualism-collectivism as being unidimensional, instead of adopting the Triandis' (1995, 2001) framework that considers the vertical vs. the horizontal dimensions of individualism and collectivism. If those explanations are valid, future studies on leader humility may follow two possible paths (developments below). One is adopting the Triandis' framework when studying the moderating effect of individualism-collectivism. The other one is studying cultural dimensions holistically (i.e., as configurations), instead of studying each one in an isolated way.

Overall, the multidimensional nature of culture requires that researchers on leader humility delve into a deeper exploration of how humility (a) expresses differently in different cultural configurational contexts and (b) how those configurations condition (i.e., moderate) the influence of leader humility on employees and organizational outcomes. Such complexity may even create paradoxical tensions, mainly when the team or organization is culturally diverse and the leader has to deal, at the multicultural and cross-cultural level, with stakeholders with

Table 3Incremental validity and relative weights analyses of leader humility as compared to transformational leadership.

	DV = Job P	erformance		DV = Ind	lividual OCB		DV = C	V = CWB					
	β	RW	RW%		β	RW	RW%	_			β	RW	RW%
TL LH R ² ΔR ²	0.183*** 0.217*** 0.112*** 0.039***	0.051 0.062	45.0 % 55.0 %	TL LH R^2 ΔR^2	0.171*** 0.271*** 0.140*** 0.062***	0.052 0.089	36.7 9 63.3 9		TL LH R ² ΔR ²		-0.255*** 0.062 0.056*** 0.003	0.054 0.002	95.7 % 4.3 %
	DV = Individ	ual Creativity/In	novation		DV = Uni	t-Level Performa	nce]	DV =	Job Satisfaction		
	β	RW		RW%		β	RW	RW%			β	RW	RW%
TL LH R ² ΔR ²	0.064* 0.364*** 0.156*** 0.111***	0.024 0.132		15.3 % 84.7 %	TL LH R^2 ΔR^2	0.133*** 0.317*** 0.152*** 0.084***	0.041 0.111	27.2 % 72.8 %	1	TL LH R ² ΔR ²	0.262*** 0.395*** 0.308*** 0.131***	0.117 0.191	38.0 % 62.0 %
	DV = Job Engagement			DV = Tu		DV = Trust in Leader							
	β	RW	RW%		β	RW	RW	%			β	RW	RW%
TL LH R^2 ΔR^2	0.414*** 0.164*** 0.253*** 0.023***	0.187 0.066	74.0 % 26.0 %	TL LH R ² ΔR ²	-0.185*** -0.306*** 0.173*** 0.079***		35.5 64.5		TL LH R ² ΔR ²		0.483*** 0.417*** 0.568*** 0.146***	0.309 0.259	54.4 % 45.6 %
			DV	= Psychologic	al Empowerm	ent							
			β				R	N					RW%
TL LH R^2 ΔR^2			0.24 0.24	43*** 43*** 43*** 50***				146 097					60.1 % 39.9 %

Note. β = standardized regression weights; RW = relative weight; RW% = percent of relative weight (determined by dividing individual relative weight by the sum of individual relative weights and multiplying by 100); R^2 = multiple correlations; ΔR^2 = change in R^2 as a result of leader humility being entered into the step 2 of regression analyses; DV = dependent variable; TL = transformational leadership; LH = leader humility; OCB = organizational citizenship behavior; CWB = counterproductive work behavior.

different perspectives and mindsets about, e.g., what it means to be a humble leader (developments below).

Our findings (that culture moderates the relationship between leader humility and outcomes) are also a clear "warn" to scholars aiming at studying leader humility: it is crucial to avoid mixing different conceptualizations of leader humility in literature reviews and meta-analyses without calculating and distinguishing the differential effects. When constructs such as leader-expressed humility, dispositional humility, honesty-humility, and humility as a component of servant leadership are conflated under the expression "leader humility," the granularities inherent to each one of these constructs may be hidden, with negative consequences for the validity of the (meta-analytical) empirical landscape. This is something that future studies must consider carefully, together with other avenues for future research that we explore below.

Our meta-analysis also shows that religiosity moderates the relationship between leader humility and several outcomes. Considering the association between humility and religiosity, and that the latter has been empirically understudied by organizational scholars, this is an important contribution for the literature on leader humility. Future studies may explore if that moderating effect also emerges for other conceptualizations of leader humility. We acknowledge, however, that our findings may be susceptible to ecological fallacy, and that religiosity has several nuances that our research does not capture, these being points we develop further below.

Another point worthy of being mentioned here is that the relationships between leader humility and some outcomes (e.g., creativity/

innovation) differ somewhat at the individual vs. group levels. Several reasons may explain such an empirical pattern. First, the ways the constructs are operationalized across studies are sometimes different, and commensurability is not found across levels. Second, isomorphism must not be taken for granted. For example, team creativity is not the mere sum of team members' creativity (Pirola-Merlo & Mann, 2004; Rego et al., 2016; Taggar, 2002), and team members' creativity may give rise to different levels of team creativity as a consequence of distinct emotional, relational, communicational, information processing, leadermember exchanges and synergistic processes within the teams (Bechtoldt et al., 2010; Pirola-Merlo & Mann, 2004). Future studies may explore how, and in which conditions, leader humility influences those processes and facilitates/hinders isomorphic effects.

5.1. Limitations and suggestions for future research

The present study has a set of limitations, and future studies (beyond those mentioned earlier) must be carried out to deal with those limitations and explore new research avenues. First, although we were able to identify some moderator effects, Var_{art}% statistics in a series of meta-analytic distributions are still small, thus suggesting some possible unidentified moderators. To better manage the scope of our study and in light of the distribution of our samples and the number of samples across meta-analytic distributions, we encourage future research to test more moderators (as well as moderators at different levels), which may account for the heterogeneity in effect size distributions. For example, future research may perform further cross-cultural comparisons with

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

Table 4
Incremental Validity and Relative Weights Analyses of Leader Humility as Compared to Authentic Leadership.

	DV = Job Per	DV = Job Performance					al OCB				DV = CWB		
	β	RW	RW%			β	RW	RW%		_	β	RW	RW%
AL LH R ² ΔR ²	-0.071* 0.335*** 0.087*** 0.068***	0.011 0.076	13.0 % 87.0 %	AL LH R ² ΔR ²		0.441*** 0.062* 0.233*** 0.002*	0.174 0.059	74.7 % 25.3 %	AI LI- R ² ΔI	I	-0.472*** 0.258*** 0.136*** 0.040***	0.115 0.021	84.7 % 15.3 %
	DV = Individual C	creativity/				DV = Unit-L Performance					DV = Job Satisfaction		
	β		RW	RW%		β		RW	RW%		β	RW	RW%
AL LH R^2 ΔR^2	0.140*** 0.302*** 0.164*** 0.055***		0.060 0.104	36.8 % 63.2 %	AL LH R ² ΔR ²	0.277*** 0.196*** 0.183*** 0.023***		0.103 0.080	56.3 % 43.7 %	AL LH R ² ΔR ²	0.356*** 0.275*** 0.327*** 0.046***	0.179 0.148	54.7 % 45.3 %
	DV = Job Engagement					DV = Turnove	er Intention				DV = Trust in	Leader	
	β	RW	RW%			β	RW	RW%	_	_	β	RW	RW%
AL LH R ² ΔR ²	0.269*** 0.161*** 0.152*** 0.016***	0.090 0.062	59.2 % 40.8 %	AL LH R^2 ΔR^2		0.049 -0.411*** 0.146*** 0.102***	0.023 0.123	15.6 % 84.4 %	L R	Н	0.441*** 0.332*** 0.489*** 0.067***	0.270 0.219	55.2 % 44.8 %
			DV = Psy	chological !	Empow	erment							
			β						RW				RW%
AL LH R ² ΔR ²			0.449*** 0.097** 0.266*** 0.006**						0.1				71.8 % 28.2 %

Note. β = standardized regression weights; RW = relative weight; RW% = percent of relative weight (determined by dividing individual relative weight by the sum of individual relative weights and multiplying by 100); R^2 = multiple correlations; ΔR^2 = incremental change in R^2 as a result of leader humility being entered into the step 2 of regression analyses; DV = dependent variable; AL = authentic leadership; LH = leader humility; OCB = organizational citizenship behavior; CWB = counterproductive work behavior.

other cultural dimensions (e.g., power distance; egalitarianism; vertical vs. horizontal individualism-collectivism, as developed below) to examine how they might impact the relationships in the nomological network of leader humility. Treating cultural dimensions as configurations, instead of separately, is also worthy of being explored when studying the boundary conditions and the contextual antecedents (Wang et al., 2024) of leader humility.

Moreover, while we based our approach of individualism-collectivism on the Hofstede's model (Hofstede et al., 2010), there are "many varieties" of that culture feature (Triandis, 2001: 909). Future studies could benefit from adopting the individual-collectivism model as advanced by Triandis (1995, 2001), who identified four types of cultures (a) horizontal individualism (individuals want to be unique), (b) vertical individualism (individuals "want to do their own thing and also to be 'the best'"; Triandis, 2001: 910), (c) horizontal collectivism (individuals merge their identities with their ingroups) and (d) vertical collectivism (people are willing to sacrifice themselves for their ingroup and to submit to the respective authorities). In this regard, future studies may explore two research avenues.

On the one hand, it could be interesting to investigate how individuals from those different cultures, or who espouse the values associated with them, react toward leader humility. For example, it is possible that vertical collectivists react less unfavorably (or more favorably) to their unhumble authorities, while horizontal individualists may react in a particularly negative way to such a leadership style that hinders their willingness to "shine" as individuals. On the other hand, it is possible that leaders express their humility differently in those different cultures. For example, it makes sense to consider that the "appreciation of others' strengths and contributions" (a dimension of the humility construct adopted in this paper) is displayed differently in horizontal individualistic (the "other" to be "appreciated" may be the individual and his/her uniqueness; Lin et al., 2024) vs. vertical collectivistic cultures (the collective as a unity). We consider that those research avenues, which are much underexplored, may be highly beneficial for both research and practice, in that the interplay between individualism-collectivism and humility may be more complex than what literature has suggested.

Moreover, given the increasing prevalence of multinational and multicultural teams and organizations, leaders are more and more frequently tasked with navigating different or even competing cultural expectations within the same group or organization, creating new, not yet understood challenges for the practice of leader humility. Those challenges may even contain paradoxical dimensions. For example, although a humble leader is more likely to respect cultural differences within the team, different team members may have different and even contrasting perspectives about whether a leader must behave vs. not behave humbly, and how humility must be expressed toward the team. Future studies may explore those potential contradictions, as well as the interplay between cultural intelligence (and other intercultural

^{*}p < .05, **p < .01, ***p < .001.

 $^{^{5}\,}$ We are very grateful to one reviewer for having pointed out the relevance of this approach.

competencies; Leung et al., 2014) and humility in leaders (Caligiuri & Caprar, 2023; Chan & Reece, 2021; Luu, 2020).

Second, future studies may explore other paradoxes (Cunha et al., 2021; Miron-Spektor et al., 2018) involving humility in leaders. While we acknowledge that, as suggested by Ou et al. (2018), humble leaders may be more able to recognize and accept the existence of paradoxical tensions in their work environments, we also agree with other researchers who have defended that, to be effective, humble leaders must demonstrate other characteristics that are in tension with humility. For example, Giustiniano et al. (2020: 972) argued that resilient leaders must demonstrate both "courage to make unpopular decisions" and "humility to listen the crowd" (see also Vera & Crossan, 2023). Waldman and Bowen (2016: 318) suggested that effective leaders have "a strong sense of self in terms of both self-concept and self-efficacy while simultaneously displaying humility". Rego et al. (2022) showed that leaders who are both gritty and humble are more able to foster employees' improvisational behaviors. Therefore, the impact of leader humility on employees and organizational outcomes may be conditional on other (contradictory) leader characteristics and behaviors. While these and other contradictory tensions have been much understudied at the empirical level and are therefore not represented in this meta-analysis, they represent a potentially very promising research avenue.

Third, future research may explore other key boundary conditions, such as industry or sector types (e.g., service-oriented industries vs. highly competitive, fast paced industries), organizational structure (e.g., organic vs. mechanistic), the organizational unity "nature" (e.g., the manufacturing floor vs. the "white collars" units) and the level of organizational hierarchy. For example, is leader humility less valued in the technology sector, where many companies are comprised of a "mostly male force" (Seiner, 2019: 86), than in more "feminine" sectors or where women prevail in the workforce? Does a leader express humility differently in the lower vs. the higher levels of organizational hierarchy? Is the three-dimensional construct of leader humility invariant across hierarchical levels (and, by the way, sectors and type of organizational units)? Are some dimensions (e.g., appreciation of others' contributions) more relevant for the organizational performance when performed by the top vs. low level managers, as the reliance on contributions from followers is more beneficial for the former (i.e., top managers) due to their broader strategic (and cognitive, creative, visionary, and pattern recognition) focus? We avow that this future line of investigations may enable a more nuanced understanding of the nomological network and the construct validity of leader humility.

Fourth, and still associated with the moderating effects, our study may be affected by ecological fallacy (Brewer & Venaik, 2014), in that data at the national level are applied and interpreted at the individual and unit levels. Future studies must assess "culture" at the individual and unit levels. Such an endeavor may be particularly relevant for religiosity and its several orientations (intrinsic, extrinsic, and fundamentalist; Chan-Serafin et al., 2013), whose association with humility is complex. It is possible that the intrinsic orientation (living one's religion with sincerity) plays a stronger moderator effect than the extrinsic orientation (i.e., using religion instrumentally). Individuals with an intrinsic vs. extrinsic orientation are likely to be humbler and value humility more (Aghababaei, 2012; Silvia et al., 2014). It is also possible that a fundamentalist orientation (an extreme belief on the literal and absolute truth of one particular religion) is associated with lower humility (Malotky, 2009). As mentioned above, the possible existence of those differences among individuals of the same team/organization may create paradoxical challenges for leaders who operate at multicultural and cross-cultural levels.

Fifth, such a research avenue is important also because organizational behavior and management scholars have paid no attention to the association between religiosity and leader humility (e.g., Chandler et al., 2023; Kelemen et al., 2023). Such an absence is surprising in that humility is deeply rooted in many religious and philosophical ideologies, and, as Chan-Serafin et al. (2013: 1585) suggested, "organizational

scholars need to rigorously address the potential consequences of religion at work in a dispassionate manner that acknowledges both the benefits/adaptive outcomes and the challenges/maladaptive outcomes". Such an endeavor is particularly relevant for humility and, specifically, for humility in leader-followers' relationships. If religion matters for so many people, why might it be irrelevant in workplaces? Future studies may also explore the role played by secular ethics (associated, e.g., with the socially dominant principles of individual rights vs. collective welfare and social harmony; or of equity vs. equality) in low-religiosity environments (Wynn, 2015), both as an antecedent of leader humility (e.g., is humility expressed differently in different secular ethics contexts?) and as a boundary condition (e.g., is the influence of leader humility on employees and organizational outcomes moderated by the prevalent secular ethics in the focal context?)

Sixth, the present meta-analysis primarily includes studies based on samples from Eastern cultures. Acting humbly is more valued in Eastern vs. Western cultures because humble behaviors foster interpersonal harmony and other positive outcomes (Hu et al., 2018; Oc et al., 2015; Ou et al., 2014) that are more valued in Eastern contexts. This does not mean, and empirical studies do not support, however, that leader humility is not valued in the Western contexts. Future research may thus examine the role of cross-cultural contexts in moderating the relationships between leader humility and its outcomes. This cross-cultural comparison will contribute to explore the emic and etic effects of leader humility and may help scholars and practitioners better understand how to unlock the fullest potential of leader humility across different cultural contexts.

Seventh, the current study does not include antecedents of leader humility. Uncovering those antecedents is of utmost importance to help scholars develop a better understanding of its construct nomological network and assist practitioners to better comprehend how to develop training programs and other interventions to improve leader humility and/or to implement valid selection procedures to hire job candidates with the potential to be humble (see, e.g., Owens et al., 2013; Sadler-Smith & Cojuharenco, 2021; Wang, Liu, Hsieh, & Zhang, 2022; Wang, Liu, Wen, & Xiao, 2022).

Eighth, although we performed the construct redundancy test of leader humility in relation to transformational leadership and authentic leadership, we were unable to perform tests comparing to other additional established leadership constructs, such as servant leadership, due to a lack of sufficient empirical studies. Previous studies have called for a potential theoretical integration of a set of overlapped leadership constructs in order to formulate a grand unified theory of leadership (e.g., Banks et al., 2018). Performing further construct redundancy will help scholars not only better understand the unique construct domain of leader humility, but also clarify where leader humility is located relative to other established leadership constructs.

6. Conclusion

Our meta-analysis, which summarizes more than a decade worth of studies on the construct of leader humility, generally supports the positive role of leader humility in predicting a series of attitudinal and behavioral outcomes across both individual and unit levels. We also found some evidence regarding the moderating roles of national culture and country-level religiosity. The construct redundancy issue of leader humility appears to be more evident relative to authentic leadership than to transformational leadership. We encourage scholars to consider our meta-analytic findings as they pave new pathways for future research on leader humility.

CRediT authorship contribution statement

Anthony Silard: Writing – review & editing, Writing – original draft, Visualization, Supervision, Resources, Project administration, Investigation, Formal analysis, Conceptualization. **Chao Miao:** Writing –

review & editing, Writing – original draft, Visualization, Validation, Supervision, Resources, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. Arménio Rego: Writing – review & editing, Writing – original draft, Investigation, Funding acquisition, Conceptualization. Eren Akkan: Writing – review & editing, Writing – original draft, Investigation, Conceptualization. David Yoon: Writing – original draft, Methodology, Investigation, Data curation. Shanshan Qian: Writing – original draft, Methodology, Investigation, Data curation.

Declaration of competing interest

none.

Acknowledgements

Arménio Rego is grateful to Fundação para a Ciência e a Tecnologia (UIDB/00731/2020 – DOI: 10.54499/UIDB/00731/2020; UIDB/00315/2020).

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.paid.2025.113196.

Data availability

Data will be made available on request.

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