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How leader humility helps teams to be humbler, psychologically stronger, and more effective: A moderated mediation model☆

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ABSTRACT

We hypothesize that (a) the *level* of humility expressed by leaders predicts team performance through, serially, team humility and team PsyCap, and (b) the *strength* (i.e., consensus within the team) of the leader humility, team humility and team PsyCap moderates the paths of that hypothesized model. A sample comprising 82 teams (82 leaders; 332 team members) was collected. Team members reported leader humility, team humility and team PsyCap. Leaders reported team performance. To handle the risks of common method bias, each mediating path of the hypothesized model is based on data from two different subsamples within each team. Our model's most novel theoretical contribution is the (moderated mediated) connection between leader humility, collective humility, and team PsyCap, and this was consistently supported in our data. Our inconsistent findings dealing with the relationship between team PsyCap and performance is well established in the literature and our results in both sub-samples were in the theorized direction. The study contributes to understand *why*, *how* and *when* humble leaders are more effective.

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Introduction

Since the inception of the Positive Organizational Behavior (POB) concept (Luthans, 2002a, 2002b), several positive psychological capacities have been proposed, both theoretically and empirically, for inclusion in the POB framework (Luthans, Youssef-Morgan, & Avolio, 2015). To date, the psychological capacities deemed to best fit the POB inclusion criteria (i.e., capacities that “can be measured, developed and effectively managed for performance improvement in today’s workplace,” Luthans, 2002a, p. 59) are those included in Psychological Capital (PsyCap), a “core confidence” (Stajkovic, 2006) construct comprising four dimensions: self-efficacy, hope, resilience, and optimism. PsyCap predicts important attitudes and behaviors of employees, including performance (reviews and syntheses in Dawkins, Martin, Scott, & Sanderson, 2013; Newman, Ucbasaran, Zhu, & Hirst, 2014; Youssef & Luthans, 2012). PsyCap also

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neutralizes undesirable attitudes and behaviors (Heled, Somech, & Waters, 2016). For these reasons, it has been argued that PsyCap “goes beyond” (Luthans et al., 2015) other forms of capital (i.e., economic, human, and social) and thus constitutes a source of sustainable competitive advantage in today's highly competitive environments (Luthans & Youssef, 2004).

PsyCap has been studied mainly at the individual level, although a few empirical studies have suggested that PsyCap may develop at the team level (Dawkins, Martin, Scott, & Sanderson, 2015) and have positive consequences for team outcomes, including cohesion, cooperation, coordination, and team/organizational in-role and extra-role performance (e.g., Clapp-Smith, Vogelgesang, & Avey, 2009; Heled et al., 2016; Mathe-Soulek, Scott-Halsell, Kim, & Krawczyk, 2014; McKenny, Short, & Payne, 2013; Peterson & Zhang, 2011; West, Patera, & Carsten, 2009). It is therefore important to investigate the antecedents of PsyCap at the team level because work teams are increasingly important to individual and team functioning, performance, and success (Gully, Incalcaterra, Joshi, & Beaubian, 2002; West et al., 2009). Unfortunately, the empirical evidence about the antecedents of PsyCap is relatively modest, as discussed by several authors (Avey, 2014; Avey, Reichard, Luthans, & Mhatre, 2011). Even more modest are studies focusing on the antecedents of team PsyCap, as argued by Newman et al. (2014) and Heled et al. (2016).

In this study we contribute to the filling of this gap by investigating how humble leaders develop team PsyCap through fostering team humility, and, as a consequence, contribute to team performance, as rated by team supervisors (henceforth we will refer to this as “team performance”). Based on grounded theory (Owens & Hekman, 2012), leader-expressed humility refers to the three behavioral dimensions of (1) admitting mistakes and limitations, (2) spotlighting team members' strengths and deflecting praise to others, and (3) being teachable (Owens, Johnson, & Mitchell, 2013). By team humility, we mean an interpersonal team process involving the three underlying dimensions of humility mentioned above (Owens & Hekman, 2016). It has been argued that humility in leaders is relevant for team and organizational performance, but empirical studies supporting this view are scarce. We propose that leader-expressed humility influences team performance through the process of team humility, which in turn fosters team PsyCap. In line with Owens and Hekman (2016), one core premise of our hypothesized model is that leaders' modeling of humility is an influential team input that will lead to positive team interpersonal processes (i.e., team humility) and emergent states (i.e., team PsyCap), leading to higher team performance.

While leadership has been considered one of the most important contextual factors influencing team performance (Williams, Parker, & Turner, 2010), more research is necessary to understand the mechanisms linking leader behaviors to team performance (Avolio, Walumbwa, & Weber, 2009; Burke et al., 2006; Owens & Hekman, 2016). We suggest that through the processes of social learning (Bandura, 1977), the positive benefits of team leaders modeling humble behaviors will shape team interpersonal processes that reflects the leader's humble behaviors, which will in turn foster team PsyCap. Our study also answers the call for more research to understand the mediating and moderating mechanisms that link leader behaviors to follower outcomes (Avolio et al., 2009; Yukl, 1999). Specifically, in our hypothesized model, the three indirect paths linking leader humility with team performance are moderated by the consistency with which the team members perceive the respective leader and the team.

Research on organizational/team climate (Schneider, Ehrhart, & Macey, 2013) suggests that although team members share the perceptions about the climate (including the team leader and the team) in which they operate, some degree of variability may be found within teams. Based on conceptual and measurement explanations (discussion below), research also suggests that the relationship between the climate level and its outcomes is stronger when the climate strength (i.e., the consistency of perceptions within the team) is high versus low (González-Romá, Fortes-Ferreira, & Peiró, 2009; González-Romá, Peiró, & Tordera, 2002; Schneider, Salvaggio, & Subirats, 2002). Therefore, we consider that the relationships between the variables of our hypothesized model (Fig. 1) are stronger when the climate strength is higher versus lower, that is, when all team members within the team perceive the leader and the team in a more versus less consistent way.

With this in mind, we structure the paper as follows: We start by clarifying both the conceptualization of humility and the dimensional model of “expressed humility” adopted herein. We then discuss how humility and PsyCap may emerge as team phenomena and why expressed humility in leaders predicts team performance through, serially, team humility and team PsyCap. Finally, we discuss why the strength of (a) leader-expressed humility, (b) team humility, and (c) team PsyCap moderate the relationship between, respectively, (a) leader-expressed humility and team humility, (b) team humility and team PsyCap, and (c) team PsyCap and team performance. Then, after presenting the method and the results, we discuss the main findings, the limitations of the study, and possible avenues for future research. We conclude with some implications for action.

The study makes five important contributions. First, it further elucidates the interpersonal implications of both humility (Owens et al., 2013) and PsyCap (Dawkins et al., 2015) by examining these constructs at the team level. This furthers theoretical understanding

Hypothesized model

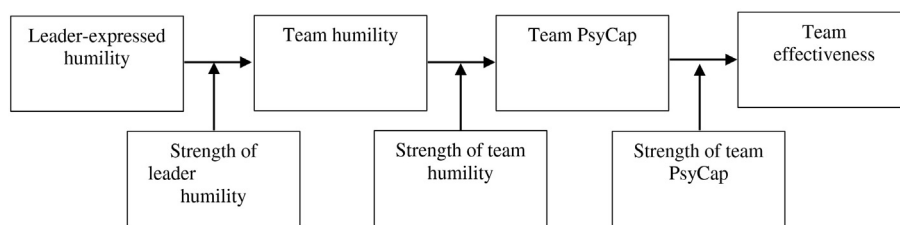


Fig. 1. Hypothesized model.

about the social nature of these phenomena and lends practical insight about how these positive team phenomena develop in organizations through social learning and contagion. Second, it suggests that teams and organizations may develop team PsyCap and, in turn, team performance, through selecting or cultivating humble leaders. Third, the study provides empirical support for the relevance of humility in leaders, a field characterized by a scarcity of empirical evidence (Oc, Basshur, Daniels, Greguras, & Diefendorff, 2015; Owens & Hekman, 2012). Fourth, the study suggests that the consistency of expressed leader's humility, team humility, and team PsyCap within the team moderates the mediated relationship between the level of leader humility and team performance: the relationship is stronger when consistency is high versus low. For a better understanding of the impact of leader-expressed humility, team humility, and team PsyCap on team performance, it is important to consider not only the aggregated scores within the team of leader-expressed humility, team humility, and team PsyCap, but also the consensus among team members about those components of team climate.

Theory and hypotheses

Humility background

The word *humility* comes from the Latin *humus*, meaning “earth” or “ground,” and from the Latin word *humilis*, which means “on the ground” (Argandoña, 2015; Owens, Rowatt, & Wilkins, 2012). Being humble means having a grounded view of oneself and others. A grounded perspective enables humble individuals to acknowledge their personal strengths and weaknesses (as well as those of others) without fostering feelings of superiority or inferiority. This apparent simplicity disguises the lack of consensus among researchers about the definition of humility and is a reason for the scarcity of empirical studies on humility in leadership. Although some literature often conflates humility with modesty, honesty, empathy, low self-esteem, low narcissism, empathy, and integrity (Ashton & Lee, 2007; de Vries, Lee, & Ashton, 2008; Ogunfowora & Bourdage, 2014; Tangney, 2000), these constructs are distinct from humility (Exline et al., 2004; Meagher, Leman, Bias, Latendresse, & Rowatt, 2015; Owens et al., 2012, 2013). The lack of clarification is also found in considering humility as a virtue, a personality trait, a psychological strength, a value, or an orientation (Owens et al., 2013).

Behavioral humility

In this paper, we adopt the Owens et al. (Owens & Hekman, 2012; Owens et al., 2012, 2013) framework. These authors focused on “expressed humility” (i.e., on observable behaviors interpreted by observers/followers as reflecting humility). The expressed humility construct reflects the *interpersonal* nature of humility and comprises three dimensions: (1) showing a willingness to evaluate oneself without positive or negative exaggeration; (2) showing appreciation for the unique strengths and contributions of others; and (3) showing openness to new ideas, feedback, and advice (teachability).

The Owens et al. framework of expressed (i.e., *behavioral*) humility is the “first comprehensive, empirically-based conceptualization of leader humility” (Oc et al., 2015, p. 69). We acknowledge the potential relevance of the *cognitive* and *motivational* components of humility (Ou et al., 2014). However, because leadership is mainly relational (Uhl-Bien, 2006), we focus on the interpersonal (i.e., the expressed/behavioral) dimension of humility that emerges from the interactions between leaders and followers, both individually and at the team level. Owens and Hekman (2016, p. 1190) argue that “Though humility has been examined on the intrapersonal, cognitive level (Roberts & Wood, 2003), our observable, social view of humility is appropriate since our purpose is to understand humility as it pertains to leadership influence processes and team member interaction patterns.” Below, we discuss the resurgent interest in humility as an important characteristic for effective leadership. Before proceeding, we comment briefly on how leader humility relates to and is distinct from servant leadership, transformational leadership, and authentic leadership.

Leader humility and other leadership constructs

Servant leadership (SL)

Humility has been treated differently in different conceptualizations of SL (Barbuto & Wheeler, 2006; Liden, Wayne, Zhao, & Henderson, 2008; Sendjaya, Sarros, & Santora, 2008; van Dierendonck, 2011; van Dierendonck & Nuijten, 2011). SL is defined as approaching one's leadership role as a servant who is focused on others above the self and comprises the dimensions of vision, integrity, trust, service, modeling pioneering, appreciation of others, and empowerment (Greenleaf, 1977; Russell & Stone, 2002). In the literature, although humility has often been talked about in association with SL, it is not clear if humility should be considered as a component of or, rather, as an antecedent or predictor of SL. While both constructs place predominant focus on others, they differ in that SL is obviously a much broader construct and is focused on modeling serving others rather than modeling learning and development. In addition, humble leadership uniquely captures self-awareness, acknowledgment of mistakes and limits, and the legitimization of uncertainty (Owens & Hekman, 2012).

Transformational leadership (TL)

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 stir their employees to look beyond their own self-interest for the good of the group” (Bass, 1990, p. 21). The dimensions of TL (individualized consideration, idealized influence, inspirational motivation, and intellectual stimulation; Avolio & Bass, 2002) are distinct from the dimensions of leader humility. Although humble leaders are likely to provide a form of individualized consideration in acknowledging and spotlighting followers' unique contributions and strengths, and though modeling teachability may be intellectually stimulating for some, humble leadership does not capture traditional charismatic or idealized influence nor inspirational motivation. Compared to SL, humility and TL have had

very little intersection in the current literature. Scholars have theorized that humility may spell the difference between socialized or *true* TL and personalized or *pseudo* TL. Other exceptions include [Ou et al. \(2014\)](#) and [Owens and Hekman \(2016\)](#), who found that leader humility is psychometrically distinct from TL and predicts unique variance beyond TL.

Authentic leadership (AL)

Authentic leadership (a construct involving the components of self-awareness, relational transparency, internalized moral perspective, and balanced processing) also shares commonalities with humility ([Avolio & Mhatre, 2012](#); [Gardner, Coglisier, Davis, & Dickens, 2011](#)) but also important differences. For example, at its heart AL is rooted in self-clarification and genuine self-expression, while humility is rooted in self-transcendence. AL also does not capture the appreciation of others' humility dimension, and humility does not capture the characteristics comprised in the relational transparency or internalized moral perspective AL dimensions. In addition, a leader may be “authentically arrogant,” meaning that they *express* humble behaviors without being authentically/sincerely humble ([Owens & Hekman, 2012](#), p. 798). Scholars such as [May, Chan, Hodges, and Avolio \(2003, p. 249\)](#) argue that “authentic leaders are humble and are less likely to feel the need to take center stage or demand anyone's attention.” Thus, humility may be an antecedent of AL, and/or a moderator of the relationship between the components of AL and outcomes ([Diddams & Chang, 2012](#)). Future research should carefully examine the predictive differences as well the predictive complementarity of leader humility and AL.

The relevance of humility in leaders

Though some may see humility as undesirable to deal with the competitive and harsh realities of modern organizational life ([Ou et al., 2014](#); [Weiss & Knight, 1980](#)), over the past couple decades, scholars ([Argandoña, 2015](#); [Morris, Brotheridge, & Urbanski, 2005](#); [Ou et al., 2014](#); [Owens & Hekman, 2012, 2016](#); [Owens et al., 2013](#)) and practitioners ([Chowdhury, 2014](#); [Saïd Business School & Heidrick & Struggles, 2015](#)) have promoted the vital role of humility in leadership as an important foil against the hubris, greed, and inflated egos, and the misconduct and corporate scandals that can result (see the GM and Toyota cases in [Chowdhury, 2014](#)). Scholarly and popular writers have redirected admiration away from heroic leaders toward those who are endowed with qualities of character ([Kiel, 2015](#)) including humility ([Argandoña, 2015](#); [Collins, 2001](#); [Owens et al., 2013](#)). [Vera and Rodriguez-Lopez \(2004, p. 393\)](#) consider humility “a critical strength for leaders and organizations possessing it, and a dangerous weakness for those lacking it.”

In spite of this enthusiasm, [Owens, Rowatt, and Wilkins \(2012, p. 266\)](#) have noted that “work on humility in leadership remains mostly theoretical.” [Oc et al. \(2015, p. 68\)](#) argued that, while leader humility has been increasingly considered to be one of the key determinants of leadership effectiveness, empirical studies about the relevance of humility in leadership “are extremely rare.” We consider that one possible reason why humility is relevant in leaders and fosters team performance is that humble leaders foster team humility, which in turn cultivates PsyCap, a valuable “resource” for team and organizational performance. After clarifying what team humility is and discussing why team humility is fostered by the leader's expressed humility, we clarify what PsyCap and team PsyCap are and then present arguments supporting how humility in leaders nurtures team PsyCap through team humility.

Leader-expressed humility predicting team humility

Team humility may be defined as “an interpersonal team process that captures the three underlying dimensions of humility as behavioral interaction patterns of admitting mistakes and limitations, spotlighting follower strengths and deflecting praise to others, and being open to new ideas, advice, and feedback” ([Owens & Hekman, 2016](#)). Although individual and team humility are viewed as functionally isomorphic ([Morgeson & Hofmann, 1999](#)), team humility differs from individual humility in that it “more fully captures the dynamic, complementary, and co-occurring nature of the humility dimensions playing out in a social context” ([Owens & Hekman, 2016](#), p. 1092) and reflects the reality that humility is likely to be expressed predominantly in one's immediate work team.

We propose that humble leaders foster team humility because leaders have a crucial role in shaping how team members interact through their own social modeling ([Bandura, 1977](#); [Chartrand & Lakin, 2013](#); [Dragoni, 2005](#); [Naumann & Ehrhart, 2005](#); [Radel, Sarrazin, Legrain, & Wild, 2010](#)). The modeling of high-status members, such as leaders, often shapes the interaction norms and task-work functioning of groups ([Zaccaro, Rittman, & Marks, 2001](#), p. 468). From the socialization theory perspective ([Jones, 1986](#)), leaders “model the way” for teams to function ([Yaffe & Kark, 2011](#), p. 809) as their behavior is usually more powerful than others in legitimizing and socializing certain behaviors. Two recent studies (one experimental, the other a multistage survey) provide initial support that leader humility is contagious (see [Owens & Hekman, 2016](#)). However, both of these studies were conducted with a U.S. sample and, given potential cross-cultural differences, it is important to test if similar effects emerge in a different culture (Portugal in this case). Therefore, we propose that as leaders express humility the dimensions of humility will be inculcated into the interactive patterns of the teams they lead. Hence:

Hypothesis 1. As leader-expressed humility increases, team humility will increase.

Team humility predicting team PsyCap

Psychological capital

PsyCap has been defined as an individual's positive psychological state of development characterized by “(1) having confidence (efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism)

about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success” (Luthans et al., 2015, p. 2).

The four dimensions share a “common confidence” core (Stajkovic, 2006) and may be considered as manifestations of PsyCap. As suggested by Stajkovic (2006, pp. 1211–1212), “it is hard to imagine one without the other(s).” PsyCap may thus be considered a core, higher-order construct (Avey et al., 2011; Dawkins et al., 2013) that builds upon the four dimensions and represents “one’s positive appraisal of circumstances and probability for success based on motivated effort and perseverance” [emphasis in the original] (Luthans, Avolio, Avey, & Norman, 2007, p. 550). Luthans and Youssef (2007, p. 335) also argued that “allied support” for the conceptualization of PsyCap as a higher-order core construct emerges from the psychological resource theories (Hobfoll, 2002). Empirical research also supports considering PsyCap as a higher-order construct (e.g., Luthans et al., 2007; Luthans, Norman, Avolio, & Avey, 2008; Rego, Sousa, Marques, & Cunha, 2012).

The literature suggests that PsyCap predicts a wide range of important attitudes and behaviors, such as commitment, well-being, turnover intentions, creativity, and performance (reviews and syntheses in Dawkins et al., 2013; Newman et al., 2014; Youssef & Luthans, 2012). PsyCap is related to increased efforts and better performance through *enabling* the motivational potential emerging from the individuals’ skills and desires (i.e., goals) (Stajkovic, 2006). Without PsyCap, that potential remains unrealized. Moreover, PsyCap nourishes the setting of ambitious desires and challenging goals and makes individuals more focused on developing skills to reach them (Stajkovic, 2006).

Collective PsyCap

A few empirical studies have suggested that PsyCap may develop at the collective level and have consequences for team outcomes, including team/organizational performance (e.g., Clapp-Smith et al., 2009; Dawkins et al., 2015; Heled et al., 2016; Mathe-Souleik et al., 2014; Peterson & Zhang, 2011; West et al., 2009). Collective PsyCap shares commonalities with collective efficacy (“defined as a group’s shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given levels of attainments,” Bandura, 1997, p. 447) in that collective efficacy is a component, or dimension, of the multidimensional construct collective PsyCap (Dawkins et al., 2015). Peterson and Zhang (2011, p. 134) argued that, like collective efficacy, collective PsyCap is “the product of the interactive and coordinative dynamics” between team members, these dynamics creating “an emergent property that is more than the sum of the individual’s attributes” (Bandura, 1997, pp. 477–478; see Dawkins et al., 2015). Literature has shown that the other three components of PsyCap develop at the collective level (summary in Heled et al., 2016). Therefore, some convergence between collective PsyCap and collective efficacy notwithstanding, collective PsyCap is a broader construct (Dawkins et al., 2015).

Collective PsyCap manifests through different forms (Dawkins et al., 2015), including *team* PsyCap (i.e., agreement among team members in regard to the team’s shared PsyCap). Team PsyCap may be defined as “a team’s shared positive appraisal of their circumstances and probability for success under those circumstances based on their combined motivated effort and perseverance” (Peterson & Zhang, 2011, p. 134). Measuring team PsyCap requires adopting the referent-shift consensus model (West et al., 2009), as we do in this research (see the “Measures” subsection below). Team PsyCap develops at the team level through mechanisms such as ongoing interactions and coordinative dynamics, behavior modeling (Bandura, 1997), social and emotional contagion (Barsade, 2002; Dawkins et al., 2015), social sharedness (Tindale & Kameda, 2000), and mental model convergence (Mathieu, Heffner, Goodwin, Sales, & Cannon-Bowers, 2000). These mechanisms lead team members to develop similar perceptions, attitudes, and beliefs that mutually reinforce sentiments and beliefs about the team’s capacities (Biemann, Cole, & Voelpel, 2012; Dawkins et al., 2015).

Team humility as predictor of team PsyCap

Humble teams express several characteristics and behaviors that contribute to developing a team’s PsyCap (Owens & Hekman, 2016; Owens et al., 2013; Vera & Rodriguez-Lopez, 2004). This connection, generally speaking, is fitting as humility facilitates and reinforces ongoing positive growth and development (Owens & Hekman, 2012), and PsyCap is considered to be a “positive psychological state of development” (Luthans et al., 2015, p. 2). Furthermore, as PsyCap represents a set of positive, adaptive strengths, humility has been considered to be a “classical source of strength” (Tangney, 2000, p. 70) that enables or facilitates the development of other virtues and strengths (Owens, 2009).

Collective humility reflects behavioral tendencies that we argue will foster the emergent state of team PsyCap. Team emergent states, like team PsyCap, “are products of team experiences” (Marks, Mathieu, & Zaccaro, 2001, p. 358), and are “shared mental models ... established through experience among team members” (Zaccaro et al., 2001, p. 459). Such experiences help shape the mental model convergence and social contagion mentioned above. More specifically, we argue that the experience of the behaviors reflected in collective humility will develop team PsyCap for several reasons.

First, humble teams readily acknowledge limitations, actively seek feedback even if it is critical, and are ready to admit mistakes to correct them and to learn from them. The resilience component of team PsyCap may be fostered by these tendencies as acknowledging and owning up to mistakes so one can learn from them is an adaptive response to failure reflected by the concept of resilience. Second, by definition humble teams acknowledge and show appreciation for the unique expertise and contributions of its individual team members and, in consequence, team members are more likely to feel validated and confident in their abilities within the team. As each team member experiences this enhanced individual confidence and social validation of strengths and abilities, we propose that this will accrue to a heightened collective perception of efficacy as a team, which is shaped in part by the awareness of team member capabilities. Third, based on grounded theory, dealing with the function of humility in organizations (Owens & Hekman, 2012), we anticipate that teams that embrace the habit of teachability will be more likely to heed ongoing feedback and develop an adaptive

stance toward goal striving (reflecting hope) and see setbacks and bouts of failure more optimistically, as legitimate and necessary parts of the process of development and accomplishment. Thus, overall, we believe these properties of humility will help shape and reinforce the collective perceptions of hope, efficacy, resilience, and optimism. Considering the arguments presented above, we propose the following hypothesis:

Hypothesis 2. As team humility increases, team PsyCap will increase.

Team PsyCap and team performance

We further expect that these properties of team PsyCap, which we argue are facilitated by leader humility and team humility, will enhance team performance (Clapp-Smith et al., 2009; Heled et al., 2016; Mathe-Soulek et al., 2014; Roche, Haar, & Luthans, 2014; Vanno, Kaemkate, & Wongwanich, 2014; West et al., 2009). Team PsyCap contributes to team performance because (a) it enables the team to make use of the potential contained in the team's skills and competencies; (b) it makes the team more able to set challenging goals, more focused on developing skills, and more persevering toward achieving those goals; and (c) it stimulates positive social/relational dynamics within the team that make the team more cooperative and supportive in pursuing challenging goals, overcoming barriers, and facing opportunities and problems with individual and collective *grit* (Duckworth, Peterson, Matthews, & Kelly, 2007). With stronger PsyCap, a team is more likely to set challenging team goals, initiate individual and collective action, pursue goals, and cooperatively maintain perseverance in pursuing them because the team feels certain/confident in handling what it aims to achieve, or what needs to be done (Stajkovic, 2006). Hence:

Hypothesis 3. As team PsyCap increases, team performance will increase.

Leader humility predicting team performance through team humility and team PsyCap

Considering that leader-expressed humility relates to team humility (H1), team humility relates to team PsyCap (H2), and team PsyCap relates to team performance, we derive the following hypothesis:

Hypothesis 4. Leader-expressed humility will have an indirect relationship with team performance via team humility and team PsyCap serially.

The strength of team climates as moderators

Leader humility is not expressed to all team members in necessarily the same way, as has been suggested by the leader-member exchange (LMX) theoretical and empirical evidence (e.g., Graen & Uhl-Bien, 1995; Schriesheim, Castro, & Cogliser, 1999). Even if it would be, it is reasonable to expect that different team members, having different personalities, experiences, and interactions both within and outside the team, would interpret the same leader-expressed behaviors differently. The same reasoning may be applied to how team members perceive, interpret, and make sense of the team characteristics. Research on organizational/team climate (Schneider et al., 2002, 2013) suggests that although team members share a considerable number of perceptions about the climate in which they operate, some degree of variability may be found within teams. The construct that characterizes this dispersion is called “climate strength.” Different from the “climate level,” which represents the average of individual perceptions within the team, the climate strength reflects a measure for within-group variability in climate perceptions. Consistent perceptions within the team represent a stronger “climate strength” and eventually mean that team members interpret events in a similar fashion and possess similar beliefs regarding appropriate and inappropriate attitudinal behavioral responses to those situations (Lee & Dalal, 2016; Mischel, 1977).

Although empirical evidence is inconsistent (Schneider et al., 2013), some literature suggests that climate strength moderates the relationship between the climate level and its outcomes: the relationship is stronger versus lower when the climate strength is high versus low¹ (González-Romá et al., 2002, 2009; Li, Cropanzano, & Molina, 2015; Schneider et al., 2002). Two main complementary explanations have been proposed (Schneider et al., 2013). The first explanation, at the measurement level, considers that high consensus within a team provides a more reliable mean score (i.e., about the climate level) and, as a consequence, greater validity in predicting employees' attitudes and behaviors. The second explanation, at the conceptual level, proposes that a stronger climate equips team members with clearer and more consistent information about the team (Lee & Dalal, 2016; Meyer et al., 2010). Schneider, Ehrhart, and Macey (2013, p. 368) argue that “the more consistent the experiences of employees, the more likely employees are to behave consistently as a collective such that there should be more positive outcomes on the positive end and more negative outcomes on the low end.”

We consider that expressed humility of leaders, team humility, and team PsyCap are facets of the team climate and that moderating effects may be found in the relationship between each of those facets and the respective outcome. A stronger (i.e., more consistent) leader-expressed humility may provide team members with clearer and more consistent information about *true* leader humility. A

¹ Differently, stronger climates/situations attenuate the relationships between personality and behaviors, precisely because the strength of the situation “absorbs” the role played by personality (Lee & Dalal, 2016; Meyer, Dalal, & Hermida, 2010).

stronger team humility provides team members with clearer and more consistent information about *true* team humility. A stronger team PsyCap provides team members with clearer and more consistent information about *true* team PsyCap. As a consequence, (a) the team will develop more team humility when there is strong climate strength (i.e., high consensus) for leader-expressed humility, and less team humility when there is low consensus regarding leader humility; (b) the team will develop more team PsyCap when there is high consensus regarding team humility, and less team PsyCap when there is low consensus regarding team humility; and (c) the team will develop more team performance when there is high consensus regarding team PsyCap, and less team performance when there is low consensus regarding team PsyCap. Additionally, from a measurement perspective, high consensus in the team about the leader's humility, the team humility, and the team PsyCap provides more reliable mean scores on the levels of expressed humility, team humility, and team PsyCap, and thus greater validity in predicting, respectively, team humility, team PsyCap, and team performance. Hence:

Hypothesis 5. The strength of the leader-expressed humility moderates the relationship between the level/mean of expressed humility and team humility: the relationship is stronger versus weaker when the strength of the leader-expressed humility is higher versus lower.

Hypothesis 6. The strength of the team humility moderates the relationship between the level/mean of team humility and team PsyCap: the relationship is stronger versus weaker when the strength of the team humility is higher versus lower.

Hypothesis 7. The strength of the team PsyCap moderates the relationship between the level/mean of team PsyCap and team performance: the relationship is stronger versus weaker when the strength of team PsyCap is higher versus lower.

Method

Sample and procedures

Eighty-two team leaders (57.3% female; middle level; mean team size, mean age, and team tenure as team leader on Table 1), who were drawn from the researchers' professional (nonacademic) contacts, accepted an invitation to participate in the study. Their educational backgrounds were as follows: 8.5% of leaders had nine or fewer schooling years, 26.8% had twelve schooling years, 54.9% had a university degree, and 9.7% had a graduate degree. Leaders worked for 41 organizations (in sectors such as footwear, retailing, clothing, accounting services, city council, and health care) operating in Portugal. We considered a team as a group of employees having the same supervisor who interact in a regular and interdependent way to achieve common goals (Gully et al., 2002; Meneghel, Salanova, & Martínez, 2016). This description was used when we invited team leaders to participate in the study. For control, we included in the survey a measure of the perceived task interdependence. Each leader described, and was described by, a single (i.e., his/her) team.

We asked team leaders' permission to deliver a questionnaire to all team members, who then anonymously reported perceptions of the leader's humility, team's humility, and team's PsyCap, and sent their responses to the researchers either directly (in sealed envelopes) or by post. Three hundred and thirty-two team members participated (74.1% female; mean age, mean tenure in the team, and the mean length of the supervisor-employee working relationship on Table 1). The educational backgrounds of the respondents were 19.0% with nine or fewer schooling years, 39.2% with twelve schooling years, 38.5% with a university degree, and 3.3% with a graduate degree. For 31 of the teams three respondents participated, for 27 of the teams four respondents participated, for 17 teams five respondents participated, and for seven teams at least six respondents participated.

Before proceeding, some notes about the data analysis are important. First: collecting data about leader humility, team humility, and team PsyCap from the same source (i.e., team members) raised risks of common method variance (CMV; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). For this reason, we adopted a procedure recommended and/or used by some authors (Hur, van den Berg, & Wilderom, 2011; Jung & Sosik, 2002; Kozlowski, Mak, & Chao, 2016; Nemanich & Vera, 2009; Ostroff, Kinicki, & Clark, 2002; Riggs & Knight, 1994; Sosik, Avolio, & Jung, 2002): each team was randomly split into two subsamples (A and B), one subsample having been used to measure expressed humility and team PsyCap, the other to measure team humility. In this way, each mediating path of the hypothesized model (Fig. 1) is based on data from different members/sources within each team (Jung & Sosik, 2002). The process was carried with two combinations of subsamples (A → B → A; B → A → B; details below).

Second, we tested the hypotheses through conducting bias-corrected bootstrap analyses (using 5000 bootstrap samples) with the PROCESS macros developed by Hayes (2013). Considering that no template represents the full model, we tested hypotheses in two stages: (1) the full serial mediation model was tested; (2) then, two moderated mediation models were tested, the first representing the moderated leader humility → team humility → team PsyCap relationship, the other representing the moderated team humility → team PsyCap → team performance relationship.

Third, from the exploration of the data, an emerging topic led us to explore the difference between self-reported humility and expressed humility (see the "Post-hoc analysis" subsection below).

Measures

A six-point scale was used to measure all variables, the items having been translated from English to Portuguese, and then back-translated. Respondents were asked to report the extent to which different statements applied to the team, the leader, or to themselves: from (1) "the statement does not apply to this leader [this team; to me] at all" to (6) "the statement applies completely to

Table 1

Means, standard deviations, and correlations (aggregated data).

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12A	12B	13	14A	14B	15	16A	16B	17
1. Team size (number of employees)	6.24	3.35	–																			
2. Gender (0: male; 1: female) of leader	0.43	0.50	0.03	–																		
3. Age (years) of leader	43.52	11.78	0.16	0.12	–																	
4. Tenure (years) as team leader	7.25	5.09	0.10	–0.09	0.23*	–																
5. Mean age of team members	37.98	7.77	–0.02	0.00	0.37***	–0.05	–															
6. Mean education of team members ^a	2.64	1.02	–0.23*	–0.04	0.00	–0.21	–0.12	–														
7. Mean length of the supervisor–employee working relationship	5.35	3.90	0.05	0.07	0.29**	0.60***	0.39***	–0.23*	–													
8. Percent female	0.74	0.29	–0.21	–0.46***	0.02	–0.12	0.12	0.10	–0.09	–												
9. Perceived task interdependence	3.47	1.32	0.09	0.03	0.25*	0.10	0.13	–0.20	–0.01	0.11	–											
10. Narcissism	2.04	0.58	–0.07	0.01	–0.03	0.09	0.08	0.14	0.19	–0.07	0.06	–										
11. Self-reported humility	4.77	0.69	0.07	–0.07	0.25*	0.01	0.24*	0.14	0.03	0.07	–0.15	–0.06	–									
12. Level of leader-expressed humility	4.07	1.00	0.03	–0.03	–0.12	–0.03	0.11	–0.03	0.05	0.12	–0.14	0.08	0.20	–								
12. Level of leader-expressed humility (sub-sample A)	4.08	0.98	–0.02	–0.31**	–0.21	0.01	0.03	0.00	–0.16	0.13	–0.10	0.02	0.22*	0.48***								
12. Level of leader-expressed humility (subsample B)																						
13. Strength (consistency) of expressed humility	1.36	0.48	0.14	0.09	–0.14	–0.07	–0.27*	–0.16	–0.23*	–0.12	–0.05	0.01	–0.26*	0.26*	0.18	–	–					
14. Level of team humility (subsample A)	3.84	0.89	0.14	–0.06	–0.02	–0.10	0.04	–0.11	–0.08	0.06	0.10	0.01	–0.06	0.64***	0.32**	0.37***	–					
14. Level of team humility (subsample B)	3.92	0.90	–0.02	–0.12	–0.4	–0.05	0.13	–0.10	–0.01	0.15	–0.03	0.10	0.14	0.51***	0.62***	0.21*	0.57***					
15. Strength (consistency) of team humility	1.04	0.39	–0.02	0.05	0.03	0.06	–0.22*	–0.28*	0.04	–0.10	–0.06	–0.10	–0.23*	0.06	0.00	0.55***	0.18	–0.05				
16. Level of team PsyCap (subsample A)	4.02	0.73	–0.01	–0.11	–0.05	0.06	0.10	–0.02	0.09	0.21	0.02	0.10	–0.01	0.65***	0.39***	0.22	0.79***	0.57***	0.11	–		
16. Level of team PsyCap (subsample B)	4.10	0.72	–0.06	–0.11	0.02	0.01	0.07	0.07	–0.08	0.20	0.02	–0.04	0.15	0.45***	0.68***	0.21	0.44***	0.76***	–0.08	0.54***	–	
17. Strength (consistency) of team PsyCap	0.94	0.34	–0.01	0.02	–0.19	–0.02	–0.19	–0.21	–0.08	–0.14	–0.02	–0.05	–0.22*	0.01	–0.05	0.52***	0.28*	–0.13	0.60***	–0.14	–0.17	–
18. Team performance	5.10	0.60	–0.02	–0.01	0.07	–0.15	–0.08	–0.02	–0.20	0.08	–0.10	–0.45***	0.16	0.23*	0.07	0.13	0.24*	0.19	0.16	0.20*	0.25*	0.06

N = 82.

* $p \leq 0.05$.** $p \leq 0.01$.*** $p \leq 0.001$.^a 1: six or fewer schooling years; 2: nine; 3: twelve; 4: university degree; 5: graduate degree.

this leader [this team; to me].” Leaders reported their own humility and narcissism (for control; see below), as well as the task interdependence within the team and team performance. Team members reported the leader's expressed humility, the team humility, and the team PsyCap (individual data were then aggregated to the leader/team level; see below). Next, to increase clarity, we use the expressions “self-reported humility” to name humility as reported by the leaders themselves, and “expressed humility” for humility as reported by team members. Before proceeding, some brief notes are necessary to show why we measure leader-expressed humility through other reports.

“Once there was a boy so meek and modest, he was awarded a Most Humble badge. The next day, it was taken away because he wore it. Here ended the lesson.” The “lesson” (Gibbs, 2013) represents a paradox inherent to humility (self-presenting as very humble may be a reflex of low humility) and is reflected in the following “confession” of Archbishop Peter Akinola: “Self-seeking, self-glory, that is not me. No. Many people say I embarrass them with my humility” (Polgreen & Goodstein, 2006, p. A1). At least for some individuals, *high* self-reported humility may actually be a demonstration of *low* humility (Davis, Worthington, & Hook, 2010). As a consequence, several researchers have pointed out “serious problems” (Owens et al., 2013, p. 1522) and expressed skepticism about the validity of self-report measures of humility. Although such self-serving biases are not exclusive to self-report measures of humility (Connelly & Ones, 2010; Oh, Wang, & Mount, 2011), Tangney (2009, p. 487) suggests that “humility may represent a rare personality construct that is simply unamenable to direct self-report methods.” Considering that expressed humility is an interpersonal quality, a viable alternative to self-report is reports from close observers (Davis et al., 2010; Owens et al., 2013). In this paper we use expressed humility as reported by team members to measure the leader's expressed humility. Observers' ratings of personality have been found valid (Connelly & Ones, 2010; Oh et al., 2011). Self-reported humility is also included for control.

Leader-expressed humility

The leader's expressed humility was measured through nine items (Owens et al., 2013) representing: (1) willingness to view one-self accurately, (2) appreciation of others' strengths, and (3) teachability. Sample items are (1) “The team leader actively seeks feedback, even if it is critical,” (2) “The team leader takes notice of others' strengths,” and (3) “The team leader is willing to learn from others.” We considered leader-expressed humility as a core construct (α : 0.96), thus following Owens et al. (2013, p. 1523) who considered that the expressed humility measure “is a reflexive measure that captures three manifest indicators of the latent expressed humility construct” (see also Ou et al., 2014).

Self-reported humility

We measured self-reported humility (α : 0.81) through the same nine items after adapting them (e.g., “I actively seek feedback, even if it is critical”; “I take notice of others' strengths”; “I am willing to learn from others”).

Team humility

Team members described the team humility (α : 0.95) through nine items proposed by Owens and Hekman (2016), who adapted them from the nine-item scale (Owens et al., 2013) aimed at assessing individual humility. Items were adapted to reflect a team referent (e.g., “Members of this team admit it when they don't know how to do something”).

Team PsyCap

Team members described team's PsyCap through the PCQ-12 (Avey et al., 2011) item formulation having been adapted to the team level (West et al., 2009). A referent-shift approach (Chan, 1998; West et al., 2009), instead of the direct-consensus one, was adopted because team (*shared*) PsyCap is not just the additive composite of individual team members' PsyCap (Dawkins et al., 2015; Lengnick-Hall, Beck, & Lengnick-Hall, 2011). PCQ-12 is the short version of the PCQ-24² (Luthans et al., 2015), and includes three items to measure self-efficacy, four items to measure hope, three items to measure resilience, and two items to measure optimism. Sample items are: (1) “Our team is confident contributing to discussions about the organization's strategy” (self-efficacy), (2) “If our team should find ourselves in a jam at work, we could think of many ways to get out of it” (hope); (3) “Our team can get through difficult times at work because we have experienced difficulty before” (resilience); and (4) “Our team is optimistic about what will happen to us in the future as it pertains to work” (optimism). Considering the theoretical and empirical evidence discussed above (“Psychological capital” subsection), we considered PsyCap as a core construct measured through the indicators of self-efficacy, hope, resilience, and optimism (α : 0.90).

Team performance

Team leaders described team performance with three items (Schaubroeck, Lam, & Cha, 2007). A sample item is “This team gets its work done very effectively” (α : = 0.70). Leaders were asked, immediately after we collected data from the team members, to report the extent to which the three statements applied to the team (six-point scale mentioned above). Their responses were delivered to the researchers either directly (in sealed envelopes) or by post.

Strength of leader-expressed humility, team humility, and team PsyCap

Considering the moderating effects as hypothesized in H5, H6, and H7, the standard deviation (SD) of individual scores within each team was calculated to measure the consistency/consensus of the leader-expressed humility, the team humility, and the team PsyCap.

² Psychological Capital Questionnaire (PCQ), copyright 2007 by Fred L. Luthans, Bruce J. Avolio, & James A. Avey. All rights reserved in all media. Distributed by Mind Garden, Inc. The scale of the instrument was modified, by the customer, from the original.

We followed LeBreton and Senter (2008) and also other authors (e.g., Schneider et al., 2002) who suggest that *SD* is more appropriate than alternative measures (such as r_{wg} or *AD*). The *SD* score was reversed (through subtracting it from the score representing the team with the highest *SD*). The emerging scores were named strength of leader-expressed humility, strength of team humility, and strength of team PsyCap. Higher scores represent greater consistency/strength.

Control variables

Self-reported leader narcissism (a “personality trait encompassing grandiosity, arrogance, self-absorption, entitlement, fragile self-esteem, and hostility,” Rosenthal & Pittinsky, 2006, p. 617) was included for control. To a certain degree, narcissism is the antonym of humility in that it involves a strong desire for self-focus, attention, and self-affirmation. However, they represent different constructs, and there is theoretical and empirical evidence (Owens, Walker, & Waldman, 2015) suggesting that a leader (like Steve Jobs) may be both humble and narcissistic. Humility is not merely a lack of displayed grandiosity or self-absorption (typical of narcissistic individuals), as it includes teachability as well as appreciation of others (Ou et al., 2014; Owens et al., 2013). Morris, Brotheridge, and Urbanski (2005, p. 1335) argue that “The absence of narcissism does not necessarily imply self-awareness. At best, the absence of narcissism is a necessary but incomplete condition for humility.” Narcissism may thus relate to humility and to how the leaders describe their teams (Judge, LePine, & Rich, 2006). Narcissism was assessed with 10 items (Hendin & Cheek, 1997) that measure covert narcissism (α : 0.74). Sample items are “My feelings are easily hurt by ridicule or by the slighting remarks of others” (oversensitivity to judgment) and “I feel that I have enough on my hands without worrying about other people’s troubles” (egocentrism).

Team members’ education and mean length of the supervisor–employee working relationship were included for control as they relate to variables such as leader–member exchange, PsyCap, and how individuals describe their leaders’ humility (e.g., Avey, 2014; Dawkins et al., 2015; Owens & Hekman, 2012). Average team age was included because humility has been theorized to be valued more by older people (Tangney, 2000). Leaders’ age, gender, and tenure as team leader were included as they relate to several aspects of leadership (e.g., Barbuto, Fritz, Matkin, & Marx, 2007; Gilbert, Collins, & Brenner, 1990). They also relate to humility (e.g., Exline & Hill, 2012; Furnham, Hosoe, & Tang, 2001; Owens & Hekman, 2012; Owens et al., 2013) and may influence leaders’ descriptions of themselves and their teams. Percent female within the team was included because literature suggests that females show more humility than males (Furnham et al., 2001). Team size (number of employees) was included as it can influence team processes (e.g., Carson, Tesluk, & Marrone, 2007) and have possible impact on team PsyCap (Dawkins et al., 2015; Meneghel et al., 2016). Perceived task interdependence within the team (included because it affects interactions within the team and the team processes) was measured through two items adapted from Ramamoorthy and Flood (2004): “To carry out their jobs, team members need information and materials from other team members,” and “The team members’ jobs are related” (α : 0.75).

Testing discriminant validity and dealing with common-source bias

Because the data about the independent and the mediating variables were collected from the same team members, confirmatory factor analysis (LISREL 9.2, maximum likelihood estimation) tested if the (aggregated) data represent different constructs. Three indicators loading on the leader-expressed humility factor (corresponding to the three dimensions mentioned above), three indicators loading on the team humility factor (the same three corresponding dimensions), and four indicators loading on the team PsyCap factor (components of self-efficacy, hope, resilience, and optimism, as mentioned above) were considered. While several fit indices of the three-factor model are reasonably satisfactory (e.g., SRMR: 0.05; GFI: 0.85; CFI: 0.95; and IFI: 0.96), the two-factor model (leader-expressed humility and team humility merged) does not fit the data satisfactorily (e.g., SRMR: 0.10; GFI: 0.60; CFI and IFI: 0.78) and is significantly poorer than the three-factor model ($\Delta\chi^2_{(2)} = 173.01$; $p \leq 0.001$). Another two-factor model (team humility and team PsyCap merged) fits the data modestly (e.g., SRMR: 0.06; GFI: 0.78; CFI and IFI: 0.91) and is significantly poorer than the three-factor model ($\Delta\chi^2_{(2)} = 43.92$; $p \leq 0.001$). The single-factor model (e.g., SRMR: 0.09; GFI: 0.58; CFI and IFI: 0.75) is also significantly poorer than the three-factor model ($\Delta\chi^2_{(3)} = 203.14$; $p \leq 0.001$).

Following Podsakoff et al. (2003), we compared two models in order to examine the extent to which the results may be due to CMV. The first model includes the three factors mentioned above. The second model is identical to the first except for the addition of a latent method variance factor comprising the 10 indicators. The second model is significantly better ($\Delta\chi^2_{(13)} = 37.89$; $p \leq 0.001$) than the first one (the three factors/constructs). Additionally, Harman’s single-factor test shows that the first factor accounts for 71.79% of variance. These findings raise concerns about CMV. Consequently, following previous research (Jung & Sosik, 2002; Kozlowski et al., 2016; Nemanich & Vera, 2009; Ostroff et al., 2002; Sosik et al., 2002), each team was randomly split into two subsamples (A and B), and one subsample was used to measure leader-expressed humility and team PsyCap, the other being used to measure team humility. In this way, each mediating path of the hypothesized model (Fig. 1) is based on data emerging from different members/sources (Jung & Sosik, 2002).

To reinforce the robustness of our analysis, the leader humility $\rightarrow$ team humility $\rightarrow$ team PsyCap relationship was tested with two different combinations of subsamples (1st: $A \rightarrow B \rightarrow A$; 2nd: $B \rightarrow A \rightarrow B$). In short: in the first (second) combination, leader-expressed humility and team PsyCap were measured through data from the subsample A (B), and team humility was measured through data from the subsample B (A). This procedure proved to be important because the correlations between (a) leader-expressed humility and team humility, and (b) team humility and team PsyCap are significantly higher when the variables are measured through the same informants (same subsample) within each team versus when they are measured with different informants (Table 1). When all team members are considered for measuring leader-expressed humility, team humility, and team PsyCap, the correlations are 0.68 (leader-expressed humility $\leftrightarrow$ team humility), 0.78 (leader-expressed humility $\leftrightarrow$ team PsyCap) and 0.83 (team humility $\leftrightarrow$ team PsyCap). These findings are consistent with Ostroff et al. (2002), who showed that shared common method variance

may spuriously inflate relationships between variables and who recommended splitting samples when computing aggregate-level correlations.

We also tested if the data collected from leaders (self-reported humility, narcissism, perceived task interdependence, and team performance) represent different constructs. For self-reported humility, three indicators (the three dimensions mentioned above) were considered. For narcissism, two parcels were created (Little, Cunningham, & Shahar, 2002), one with six items representing oversensitivity to judgment, and the other representing egocentrism (Fossati et al., 2009). Therefore, a CFA was carried out involving three indicators loading on the self-reported humility factor, two indicators/parcels loading on the narcissism factor, two items loading on the perceived task interdependence factor, and three items loading on the team performance factor. The four-factor model fits the data reasonably well (e.g., SRMR: 0.08; GFI: 0.90; CFI and IFI: 0.93), while three alternative models do not: (1) a three-factor model (humility and narcissism merged: SRMR: 0.14; GFI: 0.82; CFI: 0.77; IFI: 0.78); (2) other three-factor model (perceived task interdependence and team effectiveness merged: SRMR: 0.17; GFI: 0.77; CFI: 0.70; IFI: 0.71); and (3) the single-factor model (SRMR: 0.19; GFI: 0.68; CFI: 0.36; IFI: 0.38).

We also compared two models for examining the extent to which the results are due to CMV, using the same procedure mentioned above. The second model (the four factors plus the common factor) is only marginally significantly better ($\Delta\chi^2_{(14)} = 21.56; p \leq 0.10$) than the first one (the four factors). Harman's single-factor test shows that the first factor accounts for only 28.55% of variance. The correlations between the variables included only for control (self-reported humility, narcissism, and perceived-task interdependence) are not significant. The correlations involving team performance are not significant or medium. Thus, CMV is not a concern.

Aggregating individual data at the leader/team level

To test the appropriateness of aggregating data from individuals (leader-expressed humility, team humility, and team PsyCap) at the leader/team level, $ICC(1)$, $ICC(2)$, and $r_{wg(J)}$ (uniform, rectangular distribution: “the most natural candidate to represent non-agreement,” Cohen, Doherty, & Nahum-Shani, 2009, p. 149) were estimated. The usual rule of thumb establishes that when r_{wg} exceeds 0.70, and $ICC(1)$ exceeds 0.05 (Bliese, 2000), aggregation is warranted (Cohen et al., 2009). For $ICC(2)$, values >0.60 are usually considered to be sufficient (Bliese, 2000; Chen, Mathieu, & Bliese, 2004). The means of $r_{wg(J)}$ values are 0.79 (leader-expressed humility), 0.86 (team humility), and 0.90 (team PsyCap), all being strong (LeBreton & Senter, 2008). The $ICC(1)$ values are 0.32, 0.40, and 0.35, respectively, for leader-expressed humility, team humility, and team PsyCap. $ICC(2)$ values are 0.66, 0.72, and 0.68, respectively. These findings suggest that aggregation is warranted.

Findings

Table 1 presents means, standard deviations, and correlations. For leader humility, team humility, and team PsyCap, the values relative to each subsample (A and B) within the team are presented (Garman, Davis-Lenane, & Corrigan, 2003). The level of leader-expressed humility correlates positively with the level of team humility and the level of team PsyCap, the correlations being stronger versus weaker when different versus the same subsamples are used to measure each variable. The level of leader-expressed humility, as measured by the individuals from subsample A, also correlates positively with the strength of leader-expressed humility and team performance. The level of team humility correlates positively with team PsyCap, the correlations being weaker versus stronger when different versus the same subsamples are used to measure each variable. The level of team humility, as measured by the individuals from subsample A, also correlates positively with the strength of team PsyCap and team performance. The level of team PsyCap correlates positively with team performance. The strength of leader-expressed humility correlates positively with the level of team humility (i.e., teams are humbler when leaders express humble behaviors more consistently). The three strength variables intercorrelate positively.

To test the hypothesized model, we conducted bias-corrected bootstrap analyses with the PROCESS macros developed by Hayes (2013). We first tested the serial mediation model (leader-expressed humility $\rightarrow$ team humility $\rightarrow$ team PsyCap $\rightarrow$ team performance; model template #6). The variables associating the two first mediating paths of the hypothesized model were measured with data from different subsamples (team performance measured with the team supervisor ratings), two combinations of subsamples ($A \rightarrow B \rightarrow A$; $B \rightarrow A \rightarrow B$) having been used. The findings (Table 2) show that leader-expressed humility predicts team humility, team humility (as well as leader-expressed humility) predicts team PsyCap, and team PsyCap, as measured with data from subsample B (but not leader-expressed humility or team humility) predicts team performance (although only for $p = 0.08$). When the sequence of subsamples $A \rightarrow B \rightarrow A$ is considered, the direct effect is not significant (Bootstrap SE: 0.09; Bootstrap LLCI: -0.08 ; Bootstrap ULCI: 0.26), and the indirect effect (leader humility $\rightarrow$ team humility $\rightarrow$ team PsyCap $\rightarrow$ team performance) is also nonsignificant (Bootstrap SE: 0.02; Bootstrap LLCI: -0.01 ; Bootstrap ULCI: 0.07). When the alternative sequence of subsamples ($B \rightarrow A \rightarrow B$) is considered, the direct effect is not significant (SE: 0.10; LLCI: -0.34 ; ULCI: 0.06), while the indirect effect (leader humility $\rightarrow$ team humility $\rightarrow$ team PsyCap $\rightarrow$ team performance) is significant (effect: 0.02; SE: 0.02; LLCI: 0.003; ULCI: 0.08).

Two main findings are worth mentioning here. First, the indirect effect on team performance is significant only when a sequence of subsamples is considered. Second, both the direct ($A \rightarrow B \rightarrow A$: effect: 0.38; SE: 0.07; LLCI: 0.24; ULCI: 0.52; $B \rightarrow A \rightarrow B$: effect: 0.50; SE: 0.07; LLCI: 0.36; ULCI: 0.64) and the indirect effects ($A \rightarrow B \rightarrow A$: effect: 0.12; SE: 0.05; LLCI: 0.04; ULCI: 0.25; $B \rightarrow A \rightarrow B$: effect: 0.07; SE: 0.04; LLCI: 0.02; ULCI: 0.18) of leader-expressed humility on team PsyCap are significant for the two sequences of subsamples. These findings provide support for H1 and H2. H3 and H4 are supported only for one sequence of subsamples.

We also used the PROCESS macros to test the moderating effects (model template #21). The significance of the interaction terms (leader-expressed humility $\times$ strength of leader-expressed humility; team humility $\times$ strength of expressed humility; team PsyCap

Table 2

Regression analyses (bootstrap for coefficients; 5000 bootstrap samples) (the sequence of subsamples within the team used to measure leader-expressed humility, team humility, and team PsyCap, is A → B → A [1st line], and B → A → B [2nd line], respectively).

	Outcome: team humility			Outcome: team PsyCap			Outcome: team performance		
	Coefficient	Std. error	Bias corrected 95% confidence interval [lower, upper]	Coefficient	Std. error	Bias corrected 95% confidence interval [lower, upper]	Coefficient	Std. error	Bias corrected 95% confidence interval [lower, upper]
Leader-expressed humility	0.44***	0.10	[0.24, 0.63]	0.38***	0.07	[0.24, 0.53]	0.09	0.09	[−0.08, 0.26]
Team humility	0.36**	0.11	[0.14, 0.59]	0.50***	0.07	[0.36, 0.64]	−0.14	0.10	[−0.33, 0.06]
Team PsyCap	–	–	–	0.27**	0.08	[0.11, 0.43]	0.06	0.08	[−0.11, 0.23]
				0.20**	0.07	[0.06, 0.34]	0.14	0.08	[−0.01, 0.30]
F	2.49**	–	–	6.56***	–	–	0.11	0.12	[−0.13, 0.23]
	1.31	–	–	7.65***	–	–	0.22 [#]	0.13	[−0.03, 0.48]
R ²	0.30	–	–	0.56	–	–	2.61**		
	0.19			0.59			2.67**		
							0.35		
							0.36*		

N = 82.

Control variables (not shown): team members' age, education, and mean length of the supervisor–employee working relationship; percent female; leaders' age, gender, and tenure as team leader; perceived task interdependence; narcissism; self-reported PsyCap.

[#] $p \leq 0.10$.

* $p \leq 0.05$.

** $p \leq 0.01$.

*** $p \leq 0.001$.

× strength of team PsyCap) and the conditional indirect effects were considered. We first assessed the conditional indirect effects of leader humility on team PsyCap through team humility (Table 3, left). Both the interactions between leader-expressed humility and the strength of leader-expressed humility (sequence A → B → A: $b = 0.48$; SE: 0.15; $p \leq 0.01$; LLCI: 0.17; ULCI: 0.79; B → A → B: $b = 0.43$; SE: 0.20; $p \leq 0.05$; LLCI: 0.03; ULCI: 0.84) and between team humility and the strength of expressed humility (A → B → A: $b = 0.48$; SE: 0.20; $p \leq 0.05$; LLCI: 0.08; ULCI: 0.88; B → A → B: $b = 0.43$; SE: 0.16; $p \leq 0.05$; LLCI: 0.10; ULCI: 0.75) are statistically significant.

We next considered the conditional indirect effects of team humility on team performance through team PsyCap (Table 3, right). The interaction between team humility and the strength of team humility in predicting team PsyCap (subsamples' sequence B → A: $b = 0.48$; SE: 0.20; $p \leq 0.05$; LLCI: 0.08; ULCI: 0.88; sequence A → B: $b = 0.43$; SE: 0.16; $p \leq 0.05$; LLCI: 0.10; ULCI: 0.75) is statistically significant, while the interaction between team PsyCap and the strength of team PsyCap in predicting team performance is significant

Table 3

Conditional indirect effects.

Leader humility → team humility → team PsyCap ^b					Team humility (TH) → team PsyCap (TP) → team performance ^b				
1st line: sequence of subsamples is A → B → A					1st line: the sequence of subsamples for measuring TH and TP is B → A ^c				
2nd line: sequence of subsamples is B → A → B					2nd line: the sequence of subsamples for measuring TH and TP is A → B ^d				
Strength of leader-expressed humility ^a	Strength of team humility	Effect	Bootstrap se	Bias corrected 95% confidence interval [lower, upper]	Strength of team humility	Strength of team PsyCap	Effect	Bootstrap se	Bias corrected 95% confidence interval [lower, upper]
Low	Low	0.02	0.04	[−0.03, 0.13]	Low	Low	−0.01	0.04	[−0.08, 0.07]
		0.00	0.03	[−0.04, 0.07]			0.01	0.02	[−0.01, 0.09]
Low	Middle	0.05	0.06	[−0.06, 0.16]	Low	Middle	0.02	0.04	[−0.02, 0.13]
		0.01	0.06	[−0.10, 0.12]			0.03	0.03	[−0.01, 0.13]
Low	High	0.08	0.08	[0.10, 0.25]	Low	High	0.03	0.05	[−0.02, 0.20]
		0.02	0.09	[−0.16, 0.19]			0.05	0.05	[−0.02, 0.18]
Middle	Low	0.05	0.05	[−0.03, 0.18]	Middle	Low	0.00	0.06	[−0.12, 0.12]
		0.03	0.02	[−0.01, 0.10]			0.03	0.04	[−0.04, 0.13]
Middle	Middle	0.13	0.05	[0.04, 0.25]	Middle	Middle	0.04	0.05	[−0.05, 0.16]
		0.07	0.04	[0.02, 0.16]			0.08	0.05	[0.01, 0.19]
Middle	High	0.20	0.08	[0.07, 0.37]	Middle	High	0.08	0.07	[−0.04, 0.24]
		0.11	0.06	[0.02, 0.26]			0.14	0.07	[0.03, 0.30]
High	Low	0.08	0.08	[−0.05, 0.27]	High	Low	0.00	0.09	[−0.19, 0.18]
		0.05	0.04	[−0.02, 0.15]			0.05	0.07	[−0.07, 0.19]
High	Middle	0.20	0.07	[0.08, 0.35]	High	Middle	0.06	0.08	[−0.07, 0.23]
		0.12	0.05	[0.04, 0.24]			0.14	0.08	[0.01, 0.30]
High	High	0.32	0.10	[0.13, 0.52]	High	High	0.13	0.11	[−0.05, 0.36]
		0.20	0.08	[0.06, 0.38]			0.22	0.10	[0.05, 0.46]

^a Mean and plus/minus one SD from mean.

^b Control variables (not shown): those mentioned in Table 4.

^c Leader-expressed humility, as measured through subsample A, included for control.

^d Leader-expressed humility, as measured through subsample B, included for control.

when PsyCap is measured with data from subsample B ($b = 0.56$; SE: 0.26; $p \leq 0.05$; LLCI: 0.05; ULCI: 1.08), but not when PsyCap is measured with data from subsample A ($b = 0.38$; SE: 0.34; $p = 0.27$; LLCI: -0.31 ; ULCI: 1.06). Overall, the findings (Table 3) show that the indirect effects are stronger versus weaker when team members within each team develop more versus less consistent perceptions about the team leader and the team climate.

To better understand the interaction patterns, we carried out regression analysis for the low versus the high level of each strength variable. Fig. 2A and B shows that the effect of leader-expressed humility on team humility is stronger when the consistency of leader-expressed humility is stronger. Fig. 3A and B shows that the effect of team humility on team PsyCap is stronger when the consistency of team humility is stronger versus weaker. Fig. 4A and B shows that the effect of team PsyCap on team performance is stronger when the consistency of team PsyCap is stronger. The highest/lowest level of team humility emerges when there is *high* consensus within the team about the high/low-expressed humility of the leader. The highest/lowest level of team PsyCap emerges when there is *high* consensus within the team about the high/low team humility. The highest/lowest level of team performance emerges when there is *high* consensus within the team about the high/low team PsyCap. This last finding must however be seen with caution because the interaction term is significant only when team PsyCap is measured through data from subsample B. The findings support H5 and H6, the support for H7 being marginal.

Post-hoc analysis

Considering that self-reported humility (4.77) emerged as significantly ($p \leq 0.001$) higher than leader-expressed humility (4.08; Table 1), we explored the difference between the scores emerging from each measure. We computed “comparative humility” by subtracting self-reported humility from leader-expressed humility (whole sample in each team). A higher score means that team members describe the leader as humbler than the leader describes him/herself. The mean score of comparative humility is negative (-0.68 , SD: 0.96), and most leaders (73.2%) have inflated views of their personal humility relative to their expressed humility. To explore the interplay between leader-expressed humility and self-reported humility, we created five levels (quintiles) of leader-expressed humility and computed the respective scores of self-reported humility and comparative humility. The findings (Table 4) show that while the five levels differ strongly in terms of expressed humility, they differ much less in terms of self-reported humility. Thus, the differences in comparative humility emerge mainly from differences in the leader-expressed humility as reported by team members. The leaders who are rated by team members as the humblest (#4 and #5) make more accurate descriptions of their personal humility or self-describe themselves as less humble than they are described as such by team members. In contrast, leaders who are rated by team members as the least humble make much less accurate descriptions of their own humility. Their self-reported humility is much higher than their expressed humility as reported by team members.

Discussion and conclusions

As hypothesized, leader-expressed humility predicts team PsyCap through team humility, regardless of the combinations of subsamples used to measure each variable. The positive relationship between leader humility and team humility corroborates Owens and Hekman (2016), further reinforcing the contagious nature of humility in different cultural contexts (see also Rego et al., 2017). The significant direct path between leader-expressed humility and team PsyCap also suggests that leader humility may influence team

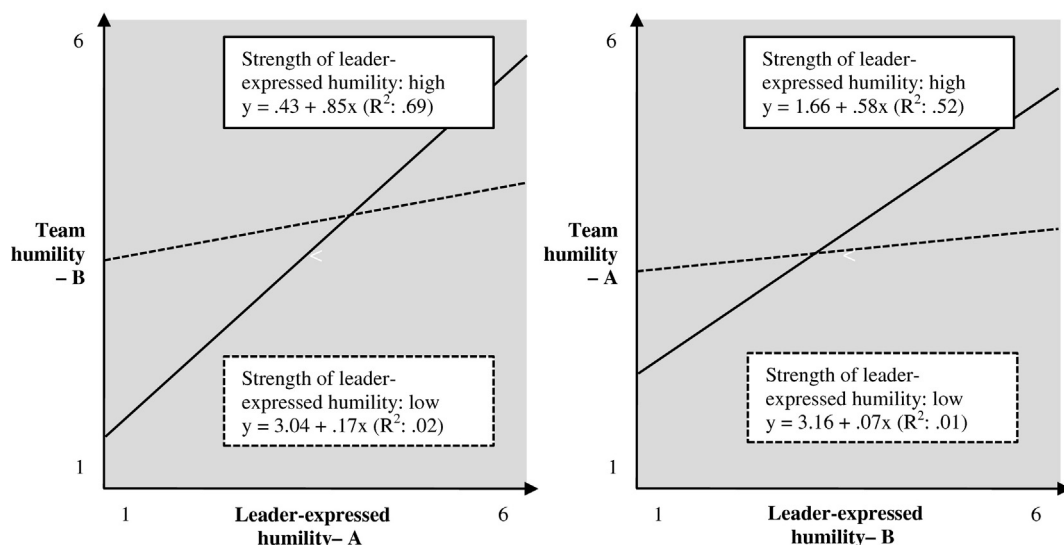


Fig. 2. How leader-expressed humility interacts with the strength (i.e., consistency within the team) of expressed leader humility to predict team humility (“A” and “B” represent the subsamples used to measure the variables).

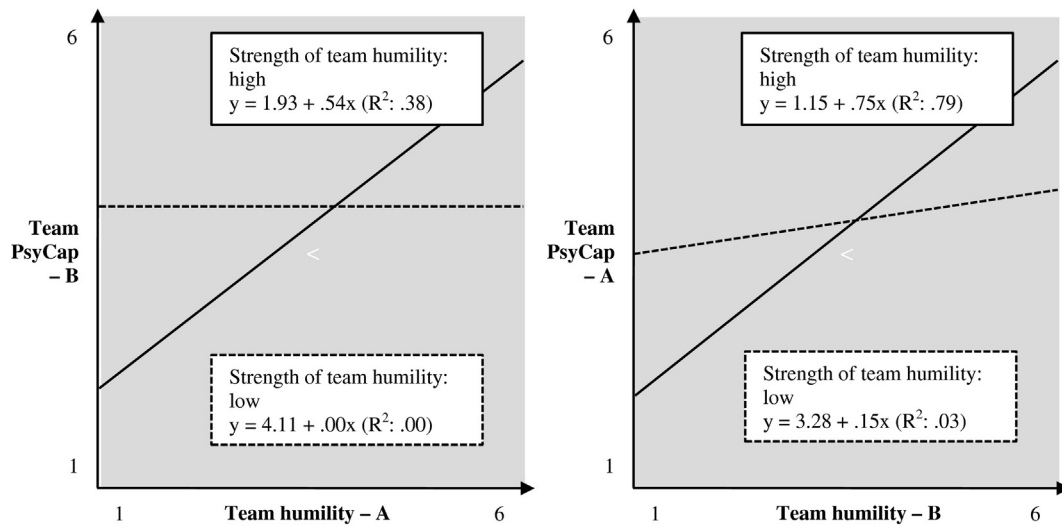


Fig. 3. How team humility interacts with the strength (i.e., consistency within the team) of team humility to predict team PsyCap (“A” and “B” represent the subsamples used to measure the variables).

PsyCap through mechanisms other than team humility (e.g., team learning: Edmondson, 2008; Owens et al., 2013; psychological safety: Edmondson & Lei, 2014; empowering leadership behaviors: Ou et al., 2014; Owens et al., 2013). With this we help fill the gap related to the scarcity of studies about the antecedents of team PsyCap. We also enrich empirical evidence on the importance of expressed humility in leaders, a field in which empirical studies are rare. Our discovery that humble leaders develop team PsyCap, both directly and through team humility, corroborates van Dierendonck and Patterson (2015, p. 124), who argue that humble leaders “catalyze learning and growing by exemplifying a learning attitude, by being open about their mistakes and limitations and by actively encouraging others’ strengths” (see also Owens & Hekman, 2012).

We also present theoretical and empirical evidence about *when* those effects are more likely to happen. Specifically, we show that humble leaders are more effective in fostering team PsyCap through team humility if they are perceived by all team members as *consistently* humble, and this finding is consistent for both combinations of subsamples used to measure each variable. It is even possible that, by being consistently humble, they also develop team humility and team PsyCap in a more consistent way, and such a consistency reinforces the positive impact of team humility on team PsyCap. Symmetrically, the consistency with which the leader expresses low humility may reinforce the negative impact of low leader humility on the subsequent team outcomes. It is possible that when team members see the leader as *consistently* not humble, the team develops a conviction that the leader genuinely lacks humility,

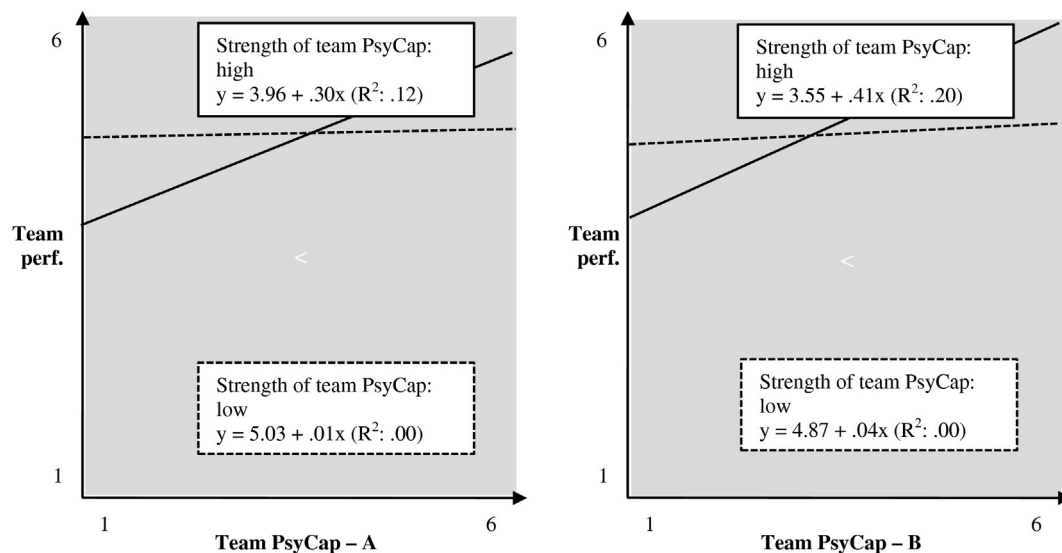


Fig. 4. How team PsyCap interacts with the strength (i.e., consistency within the team) of team PsyCap to predict team performance (“A” and “B” represent the subsamples used to measure the variable).

Table 4

Self-reported humility and comparative humility for five levels (quintiles) of the leader-expressed humility (as reported by team members).

Level of expressed humility (other-rated) →	(#1) Low (n = 16)	(#2) Low-middle (n = 17)	(#3) Middle (n = 15)	(#4) Middle-high (n = 15)	(#5) High (n = 19)	ANOVA (F)
Mean	2.95	3.56	4.01	4.53	5.21	164.44***
SD	0.45	0.10	0.12	0.17	0.36	
Self-reported humility						
Mean	4.62	4.52	4.98	4.98	4.85	1.29
SD	0.85	0.71	0.61	0.61	0.62	
Comparative humility						
Mean	−1.67	−0.95	−0.97	−0.35	0.35	22.65***
SD	0.70	0.71	0.62	0.62	0.66	

*** $p \leq 0.001$.

thus reacting with, or resulting in, the lowest level of team humility and team PsyCap. The finding is consistent with some literature on climate strength (Schneider et al., 2013) and suggests that future studies about the impact of leader-expressed humility on team outcomes should consider not only the level/mean of leader-expressed humility but also the amount of consensus within the team about how humble the leader is.

The findings relating team PsyCap with team performance are less clear. In fact, the direct path between both variables is only marginally significant ($p < 0.10$) when team PsyCap is measured with data from one subsample (B). Moreover, the interaction effect between team PsyCap and the team PsyCap strength in predicting team performance is significant only when PsyCap is measured with data from the same sample (i.e., the effect of team PsyCap on team performance is significant when team PsyCap strength is high versus low, and the effect size increases as the strength of team PsyCap also increases; Table 3, right; Fig. 4B). However, the empirical pattern is similar across both subsamples, as suggested by Fig. 4A and B. Two possible explanations are plausible for the modest/marginal significance. The first is the small sample size, thus future studies must include a larger sample size. The second explanation is how team performance was measured (see Discussion and conclusions section below).

Therefore, our model's most novel theoretical contribution is the (moderated, mediated) connection between leader humility, collective humility, and team PsyCap, and this was consistently supported in our data. Our inconsistent findings dealing with the relationship between team PsyCap and performance are well established in the literature (e.g., Clapp-Smith et al., 2009; Mathe-Soulele et al., 2014; Peterson & Zhang, 2011) and our results in both subsamples were in the theorized direction. Thus, with a larger sample size we would likely have observed this effect as well.

Discussing other relevant findings

Five other findings are noteworthy. Four of them relate to our constructs and help to support our methodological approaches and findings. The fifth one relates to gender and humility. First, the empirical evidence validates the team *shared* PsyCap construct (Dawkins et al., 2015). It is possible that through several mechanisms (e.g., ongoing interactions and coordinative dynamics, behavior modeling, social and emotional contagion, and mental-model convergence) team members develop similar perceptions, attitudes, and beliefs that mutually reinforce sentiments, attitudes, and beliefs about team capacities (Biemann et al., 2012; Dawkins et al., 2015). The consequence is a shared “core confidence” about the team's capacity to set challenging team goals and to persevere in pursuing them. Second, our findings corroborate Owens and Hekman (2016) who proposed that humility characterizes not only individuals but also collectives, including teams.

Third, leader-expressed humility as reported by team members, but not self-reported humility, emerged as a predictor of team humility, team PsyCap, and team performance (although for team performance, this relationship was significant for only one subsample). The finding is consistent with literature recommending other reports to measure humility (Davis et al., 2010; Exline et al., 2004; Meagher et al., 2015; Owens et al., 2013). We consider, however, that self-reported humility should not be discarded as a variable of interest for researchers. It is possible that, for at least some leaders, self-reported humility is an accurate measure of their true expressed humility. One finding supporting this belief is that a small number of leaders (Table 4) self-described in the same way that the team described them. Although among these *self-aware* leaders some were described by their team members as not humble, the vast majority of leaders with such an accurate perspective are described by the team as humble. This finding is consistent with Kiel (2015), who found that “virtuoso” leaders are more accurate in their self-awareness (with some humble leaders having underrated themselves in terms of their character). On the other hand, “self-focused” leaders studied by Kiel rated themselves as highly as did the “virtuosos.” In short, while self-reported humility may be a suitable way to measure the humility of *some* leaders (very likely those who truly are humble), such a method is not recommendable to measure the humility of most leaders. Thus, researchers are most often better off using other-report measures instead (or together with self-reported measures).

Fourth, our findings corroborate literature considering climate strength as a valuable construct (González-Romá et al., 2002, 2009; Schneider et al., 2002, 2013), and we advance that this is also valid for variables/climates underexplored until now, at least empirically (Dawkins et al., 2015, handles the issue theoretically for team PsyCap strength): leader-expressed humility and team humility. The

findings are less clear for team PsyCap strength (the moderating effect is only significant when PsyCap is measured with data from one subsample), one possible reason being the small sample size.

The fifth relevant finding, although not central in our study, is that female leaders tend to be rated as humbler by team members. The finding must be seen with caution because the relationship is significant only for one subsample and the entire sample, not for the other subsample. However, this evidence is consistent with studies suggesting that women score higher on measures of other-reported expressed humility (Owens et al., 2013). Genetic, evolutionary, cultural, and educational reasons may explain this difference, although investigating this was not the focus of the study. Future studies may test if gender moderates the relationship between leader humility and team outcomes. Future studies may also explore if gender affects the way that people respond to the level of expressed humility of their female versus male leaders.

Limitations and future research

Our study is not without limitations, and future studies are recommended to further establish the relationships we report here. First, our convenience sample may be considered small, as is the number of participants for some teams. Although a small sample size makes it more difficult to observe significant effects and thus may suggest our results are conservative, future studies should include a larger sample and a higher number of participants per team for rating each variable. This may also remedy the nonsignificant effects of one of our subsamples as the results were in the theorized direction but may not have been significant because of small sample size. Second, our study is cross-sectional. Although measuring the variables of our model with data from different raters allows reducing the risks of CMV, and observing significant interaction effects (i.e., our climate strength moderators) with common source data is difficult and therefore represents conservative findings (Siemsen, Roth, & Oliveira, 2010), our procedure does not allow us to establish the causal direction of our theorized model. It is possible, for example, that leaders behave more (less) humbly as a response to the higher (lower) humility of their teams. It is also possible that teams with higher team PsyCap develop more team humility (e.g., more hopeful teams may see teachability as a route to get pathways to pursue the team goals). Future studies should adopt longitudinal and experimental methods to confirm the causal arrow of our model.

The third limitation relates to the measures. Future studies may use the PCQ-24 for measuring PsyCap instead of its short form, as we did. Our measure of leader-expressed humility includes only the behavioral component, leaving aside the cognitive and motivational ones (Ou et al., 2014). As suggested by some authors, future studies may distinguish the “intention of the behavior” or the “mental attitude” (Oc et al., 2015; see Argandoña, 2015) that underpins particular behaviors. Humble behaviors may hide un-humble intentions, attitudes, and self-views, and this can have consequences for how team members react to the expressed (humble) behaviors. Future studies may also consider the intrapersonal nature of humility (Owens et al., 2013) and study if the *authenticity/sincerity* of the expressed humility (Owens & Hekman, 2012) moderates the relationship between leader-expressed humility and team outcomes. Finally, future research may distinguish grandiose narcissism from vulnerable narcissism (Campbell, Hoffman, Campbell, & Marchisio, 2011), not just by including them for control but also by testing if they relate and interact differently with humility.

Fourth, the study was carried out in a single national culture. Considering that the notions about, and the value ascribed to, humility are culturally bound (Oc et al., 2015; Owens et al., 2013; Vera & Rodriguez-Lopez, 2004), future studies may test if the findings of our study replicate in other cultures and if culture moderates the relationship between leader-expressed humility and team outcomes. Other possible moderators include individual values, task complexity, and job characteristics. For example, do individuals who value humility more, or who are humbler, react more favorably to humble leaders? Do teams whose work is characterized by high- versus low-task complexity benefit more from humble leaders?

Fifth, in line with the principle of equifinality (Morgeson, DeRue, & Karam, 2010), future studies may include other mediators as mechanisms that explain why humility in leaders predicts team outcomes. In addition to those mentioned in the “*Theory and hypotheses*” section, other mediators including team cohesion, behavioral integration (Ou et al., 2014), and positive affect (Meneghel et al., 2016) are plausible.

Sixth, considering that virtues usually grow together (Argandoña, 2015), future studies may test how humility interacts with other virtues and character strengths (e.g., courage, integrity, and compassion) in predicting team outcomes. For example, it is possible that while courage and integrity reinforce the positive impact of humility when the context is ethically problematic, compassion may have a diminishing effect if humble leaders are unable to make decisions that, although having personal implications (e.g., dismissal), are necessary to protect the team.

Seventh, the paper measured team performance through supervisors' ratings. Although being relatively common and reasonably valid, such a measure may suffer from several biases. For example, humble leaders may be more prone to acknowledge the team achievements and downplay its failings in providing ratings of team performance. In contrast, narcissistic leaders may be more “severe” in rating team performance, as suggested by the negative correlation between leaders' narcissism and team performance as rated by leaders (Table 1). It is also possible that narcissistic leaders, those who love themselves “abundantly” (Judge et al., 2006, p. 762), love others less and underestimate team performance. An alternative explanation is that narcissistic leaders, through their self-absorption, make their teams less effective. Future studies should include objective measures of team performance and/or performance ratings collected in other sources.

Implications and concluding remarks

In spite of these limitations, our approach of measuring dependent, mediating, and independent variables with data from different raters adds validity to the study, making the implications for action more pertinent. First, using humility to select future leaders may

be appropriate. Caution is necessary, however, to avoid the possibility of *less* humble leaders, aiming to be at the “center of the universe” (Ou et al., 2014, p. 4) by strategically describing themselves as *highly* humble. Although self-report may be a valid approach to assess the humility of truly humble leaders (as suggested by our findings; Table 4), it is not the best way to assess the humility of candidates with genuinely low humility. Second, virtues in general (Kiel, 2015), and humility in particular (Argandoña, 2015; Owens et al., 2012; Vera & Rodríguez-Lopez, 2004) may be learned and developed. Therefore, training and development (including mentoring and coaching) activities that emphasize the value of humility in leadership and teams may demystify the notion that equates humility with “personal retrenchment.” It also may be beneficial to train employees and leaders on the negative consequences of low humility. Third, leaders who wish to develop team performance through team humility and team PsyCap may be aware that it is not enough to be humble some of the time—it is necessary to express humility in a consistent way. In short, our study helps to “bring humility to leadership” (Morris et al., 2005) and suggests that humility is a component of character that brings a positive return (Kiel, 2015) to teams and organizations.

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