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How Leaders 'Strength of Heart' and 'Strength of Will' Enhance Team Performance

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ABSTRACT

We investigate the influence of leaders' dispositional compassion on team development and performance through two studies. In the first multi-source study ($n = 154$ team leaders), leaders' dispositional compassion is found to be associated with improved team performance through the adoption of helping behaviors aimed at developing team capabilities. This relationship is moderated by leaders' perseverance, suggesting that compassionate leaders transition from being *inclined to help* to *actually helping* only when they also demonstrate perseverance. In the second multi-source longitudinal study ($n = 52$ team leaders), we find support for the notion that the positive effect of leaders' dispositional compassion on team development-helping behaviors is conditional on leaders' perseverance, thus reinforcing our findings from the first study. We suggest that although dispositional compassion, a "strength of heart," is a well-known predictor of helping, the *feelings* and *intentions* of compassion do not guarantee helping *behaviors*. Translating these feelings and intentions into compassionate behaviors requires perseverance – a "strength of will." Hence, our study indicates that leaders' dispositional compassion is not just a potential humanizing force but also positively correlates with team performance. However, the impact of leaders' dispositional compassion on team performance only emerges through perseverance in the face of challenges.

Introduction

Scholars (e.g., Dutton et al., 2014; Worline & Dutton, 2017) and practitioners (e.g., Edgecliffe-Johnson et al., 2020; see also Hill, 2021; Inam, 2019) alike have advocated for leading with compassion as essential for fostering individual, team, and organizational thriving and performance. It has even been suggested that leading with compassion could help "transform our economic model" in the pursuit of a more sustainable society (Steenland, 2020, p. 19). However, empirical studies investigating how (i.e., mediating mechanisms) and when (i.e., boundary conditions) leaders' dispositional compassion[1] influences followers' performance are missing. A possible explanation for this scarcity of empirical studies is that leaders' dispositional compassion is often viewed as a "weakness" in character and performance (Paakkanen et al., 2021; Simpson & Berti, 2020; Thomas & Rowland, 2014). From such

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[1]Throughout this paper, "leaders' dispositional compassion" (or "leaders' compassion") and "leaders' perseverance" are discussed as general constructs, not specific to any individual leader. The frequent omission of articles (e.g., "a" or "the" leader's compassion) serves to emphasize their conceptual nature in our analysis and to maintain consistency in terminology. This approach aligns with the treatment of these constructs in the context of our research.

a perspective, "leading with the heart" makes the leader sentimental and less able to adopt "tough" decisions when necessary (Simpson & Berti, 2020). That view also considers that leading with compassion takes or depletes resources (e.g., time, energy, and efforts) that could instead be invested in fostering followers' performance (Hobfoll et al., 2018). Therefore, some leaders assume they must choose between compassion *or* performance (Mortensen & Gardner, 2022). Compassionate leaders (i.e., those who are dispositionally inclined to be compassionate[2]) may find such a choice particularly challenging, as they may be concerned about maximizing support for their employees while driving performance.

We posit, however, that compassionate leaders do not have to choose "between" the two (Mortensen & Gardner, 2022; see also George, 2014): they can promote high levels of followers' performance by adopting helping behaviors aimed at team development. Although the literature on leader compassion has focused primarily on how leaders respond (or create organizational conditions to respond) to follower suffering (Dutton et al., 2006, 2014; Kanov et al., 2004; Lilius et al., 2008; Simpson et al., 2020), we posit that leaders' dispositional compassion may manifest in contexts that, although difficult and challenging, are not necessarily characterized by severe suffering (i.e., "the state of severe distress associated with events that threaten the intactness of a person;" Cassell, 2004, p. 32). Helping team members meet unmet needs (Dutton & Workman, 2011; Paakkanen et al., 2021; Stellar et al., 2015), which includes the development of essential capabilities for performing team tasks (Boyatzis et al., 2006), is also a possible expression of leaders' dispositional compassion.

In fact, leaders' compassion, regardless of its conceptualization (e.g., as an act, an emotion, or a trait or disposition; Goetz & Simon-Thomas, 2017), encompasses both a concern for suffering or vulnerable team members and a commitment to enhance their well-being and meet their unmet needs (Boyatzis et al., 2006; Oveis et al., 2010). The prosocial, communal orientation of compassionate leaders makes them more motivated to respond to those unmet needs (Dutton & Workman, 2011; Paakkanen et al., 2021; Yitshaki et al., 2022). A significant team member need is possessing the capabilities to perform tasks that contribute to team performance (Boyatzis et al., 2006; Morgeson et al., 2010). Compassionate leaders may meet such needs by helping team members learn from past events or experiences, develop new skills, successfully handle new challenges, and learn to carry out work tasks more effectively. Supporting the team in this way enhances capabilities required for individual tasks as well as the interpersonal team processes that foster team performance (Burke et al., 2006; Morgeson et al., 2010). In a highly VUCA (i.e., volatile, uncertain, complex, and ambiguous) work environment, whereby team needs change as they move forward and face new challenges, it is increasingly important that leaders help their teams develop new capabilities, be flexible, and maximize performance (Dimas et al., 2023; Scoblic, 2020; Shuffler et al., 2018). In short, by meeting team development needs (Burke et al., 2006; Morgeson et al., 2010), compassionate leaders are better able to foster team performance and thus escape the compassion *or* performance dilemma.

Thus, we posit that compassionate leaders are more inclined to adopt team development-helping behaviors that contribute to improving team performance. This is consistent with functional leadership theory, which holds that the leadership role involves doing what "needs to be done," including helping the team develop capabilities for effective team performance (McGrath, 1962; Morgeson et al., 2010; Zaccaro et al., 2001). Performing such a functional role is, however, conditional on leader perseverance. Although compassion is a well-known predictor of helping (Batson, 2017; Dutton et al., 2014; Goetz et al., 2010), the *inclination* to be compassionate does not guarantee helping *actions* (Poulin, 2017). A leader with a compassionate disposition may be inclined to act compassionately but might also frequently face situations in which acting compassionately may be particularly difficult or viewed as inappropriate, not feasible, or impossible (Sockett, 2009). Consequently, compassionate leaders must cross that metaphorical "Rubicon" (i.e., passing from *being inclined* to help to *actually* helping; Poulin, 2017) because helping the team develop effectiveness capabilities absorbs leaders'

[2]In this paper, we use the expressions "compassionate leaders" to refer to "dispositionally compassionate leaders," and "leaders' dispositional compassion" to denote leaders' compassion as a trait or disposition. This precision is necessary as compassion may be conceptualized not only as a disposition but also as an act, an emotion, or a process.

time, energy, and other resources that could be directed toward solving other problems, handling other work challenges and overall being more personally efficient and productive (Kanov et al., 2004; Lorinkova et al., 2013). Expressing compassion through helping behaviors directed toward meeting team development needs may consequently make leaders feel they are less efficiently pursuing work goals. Spending time, energy, effort, and other resources to help the team may require diverting resources from other leadership activities (Hobfoll et al., 2018). Therefore, the compassionate inclination to meet team development needs may not necessarily produce the corresponding helping behaviors if the perceived costs are too high (Batson, 2017; C. D. Cameron, 2017; Poulin, 2017) and the leader is unable to overcome those difficulties and challenges.

Accordingly, we advance that for "strength of heart" (i.e., compassion) to translate into helping behaviors, it is necessary that the leader also possesses "strength of will," i.e., perseverance (Duckworth, 2016; Sockett, 2009), defined here as "voluntary continuation of a goal-directed action in spite of obstacles, difficulties, or discouragement" (Peterson & Seligman, 2004, p. 229). Drawing primarily on the action-phase model of compassionate goals pursuit (Poulin, 2017), we thus propose that perseverance is necessary for leaders to translate the *disposition* to help into *action*. Our hypothesized model (Figure 1) thus considers that compassionate leaders foster team performance by helping develop team capabilities, with a stronger mediating effect when the leader is perseverant in such efforts.

The study makes three main contributions. First, it deepens understanding of team performance as an important outcome of leaders' dispositional compassion. Although leaders' compassion (conceptualized in different ways, including as a process, an act, or an emotion) has been empirically studied as a driver and shaper of organizational compassion in the context of significant suffering (Dutton et al., 2006, 2014; Kanov et al., 2004; Lilius et al., 2008; Simpson et al., 2020), there is a gap in empirical studies that demonstrate how and when leaders' dispositional compassion influences team performance. Teams have become "the basic building blocks" of organizations (Mathieu et al., 2019, p. 18), and they are at the core of how work is accomplished in almost all human pursuits (Kozlowski, 2018). Therefore, as Dimas et al., (2023, p. 155) observed, "Since teams are created with the purpose of generating value for the organization, acknowledging what drives team effectiveness has been one of the main concerns of both research and practice." Hence, this study is a significant step forward in understanding how and when leaders' dispositional compassion is not just a humanizing force but also impactful in improving team performance.

Second, we explore the (mediated and conditional) outcomes of dispositional compassion in leaders. The literature about compassion in organizations has treated the construct mainly as a process (involving noticing, empathizing, assessing, and responding to others' suffering; Dutton et al., 2014) or as a behavioral expression of support for others who are suffering. However, compassion may also be studied as a disposition that is expressed through caring, supporting, and helping

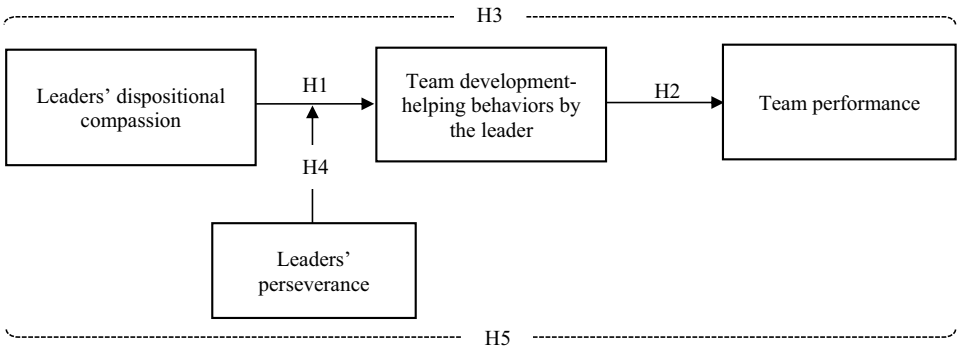

Figure 1. Hypothesized model. *$p \leq .05$. **$p \leq .01$

others in situations that do not involve significant suffering (Sprecher & Fehr, 2005; Thomas & Rowland, 2014). This approach merits further investigation, including its leadership implications, as a disposition to act compassionately enables leaders to address team needs more effectively, resulting in team satisfaction that positively impacts team performance.

Third, we provide indirect support for the action-phase model of compassionate goals pursuit (Poulin, 2017): unless the compassionate leader has perseverance, he/she may be unable to move from the deliberative phase (i.e., being inclined to help) to the implementation phase (i.e., actually helping), because helping is effortful and emotionally taxing, and may divert resources from other leader's activities. Our study thus also supports the notion that effective leaders are both communal and agentic (Fiske et al., 2002; Zhang et al., 2015). Such a both/and paradoxical approach (Smith & Lewis, 2011; Zhang et al., 2015) has not been explored empirically within the context of leading with compassion. Therefore, our study also indirectly suggests that "good leadership" (Newstead et al., 2021) requires combinations of strengths that are (at least somewhat) paradoxical in nature.

Theory and hypotheses

Compassion has been approached in various ways by researchers. Some view it as a fluctuating state (e.g., Goetz et al., 2010), while others consider it a primary motive (Gilbert, 2019), an interpersonal process (Hakanen & Pessi, 2018), or an emotion (Condon & Feldman Barrett, 2013). In our study, we adopt the perspective of compassion as a dispositional trait (e.g., Oveis et al., 2010). We define leaders' dispositional compassion as the inclination (i.e., the tendency or disposition to act with awareness and intention; Sockett, 2009) of the leader to think, feel, and act in ways that express empathy, understanding support and help toward team members in need (Runyan et al., 2019; Sprecher & Fehr, 2005; van Dierendonck & Patterson 2015).[3] Next, we discuss how leaders' dispositional compassion makes a leader more likely to adopt prosocial, helping behaviors aimed at satisfying a critical team need (i.e., team development), with positive consequences for team performance.

Leaders' dispositional compassion affects team performance by supporting team development

Compassion is "an effective mechanism to motivate helping behavior in humans" (Carter et al., 2017, p. 173). Leaders' dispositional compassion, therefore, increases the likelihood of helping a team meet its needs. One critical team need involves possessing the knowledge, skills, and competencies required for the team to perform tasks and work toward team goals (Burke et al., 2006; Kozlowski et al., 1996; Morgeson et al., 2010). At least two complementary explanations support the prediction that compassionate leaders will be more likely to help members develop team capabilities.

The first draws on the empathy-altruism hypothesis (Batson, 2011, 2017) in which empathic concern, a component of compassion, "*produces altruistic motivation*" (Batson, 2017, p. 28; italics in the original). The amplified socioemotional concern related to leaders' dispositional compassion includes heightened considerations of team members' needs, which, in turn, lead to more prosocial motivations and behaviors (Gilbert, 2019; Horberg et al., 2011). Compassionate leaders are more likely to accurately perceive a discrepancy between the team's current capabilities and what the team desires or needs. When they identify such a discrepancy, compassionate leaders recognize the intrinsic value of addressing such a need and take action to rectify it. They help team members in learning from past

[3]Compassion differs from empathy (feeling *with* others) in that, while the latter represents the feeling of another's emotion (Goetz et al., 2010), the former also involves responding with behaviors consistent with those emotions (Simpson et al., 2020). Furthermore, compassion differs from pity (sorrow for others) and sympathy (feeling *for* others). Compassion also differs from individualized consideration in that, e.g., the latter does not necessarily demand empathy and can serve instrumental purposes. To be considered truly compassionate, a "compassionate" act must be driven by intrinsic motivation rather than instrumental gain (Sockett, 2009). Moreover, although compassion entails responding to those in need, individualized consideration does not require the existence of such needs.

experiences and events, developing new skills and competencies, and improving their work tasks' effectiveness (Morgeson et al., 2010).

The second reason borrows from the appraisal tendency and the self-other similarity literature frameworks (Han et al., 2007; Oveis et al., 2010). Compassionate leaders are more likely to help the team develop its capabilities because dispositional compassion enhances the sense of self-other similarity (particularly to team members who are more in need) and facilitates altruistic behavior (Cialdini et al., 1997; Oveis et al., 2010). As Oveis et al. (2010, p. 619) argue, "as perceived self-other similarity increases, others' gains are more likely to be construed as one's own, thus increasing the likelihood of altruistic action." Helping members develop team capabilities may be considered a category of altruistic behavior. Hence:

Hypothesis 1. Leaders' dispositional compassion relates positively to the leaders' behaviors of helping team development.

Helping develop team capabilities is a pathway for improving team performance. Without the necessary skills and capabilities, teams may experience social tension, frustration, and ultimately, failure. Teams need to learn to perform tasks effectively, utilize individual and collective resources efficiently, handle new challenges and goals, and develop interpersonal processes that enable members to grow as a team (Burke et al., 2006; Morgeson et al., 2010). Leaders can contribute to satisfying those needs by: (a) helping team members learn how to accomplish specific tasks, (b) assisting new members in further developing their skills, and (c) guiding the team in learning from past events and experiences and developing new capabilities to tackle new endeavors.

Through these functional behaviors, leaders enhance and expand team members' resources, enabling the team to more effectively complete tasks, pursue objectives, and foster innovation (Christensen-Salem et al., 2021; Fischer et al., 2017). Prior research has demonstrated that leadership behavior aimed at developing the team enhances team processes and effectiveness (Kozlowski et al., 1996; Marks et al., 2000; Shuffler et al., 2018). As Morgeson et al. (2010, p. 17) noted, "this leadership function focus[es] on the capabilities required for individual task work as well as the interpersonal team processes that facilitate superior team performance, thereby enabling the team to more effectively lead itself in the future." Hence:

Hypothesis 2. Leader behaviors aimed at helping team development have a positive relationship with team performance.

According to functional leadership theory, leader behaviors of helping team development are functional precisely because they address critical team needs that support team effectiveness in task accomplishment and goal pursuit (Morgeson et al., 2010; Santos et al., 2015). Therefore, when the compassionate leader aids the team in developing these capabilities, the leader fulfills a vital functional role that contributes to fostering team performance. Through their assistance in developing the team's capabilities, compassionate leaders enhance team resources and empower the team to accomplish tasks and work toward shared objectives more effectively (Fischer et al., 2017; Morgeson et al., 2010; Shuffler et al., 2018). Hence:

Hypothesis 3. The relationship between leaders' dispositional compassion and team performance is mediated by the leaders' behaviors aimed at helping team development.

Although we consider leaders' dispositional compassion to be associated with team performance via adopting the functional role of helping the team to develop important capabilities, we also advance that such a functional effect is conditional on leaders' perseverance.

Leader perseverance as a moderator

Perseverance, often described as a "strength of will" (Duckworth, 2016), represents an agentic resource (Hobfoll et al., 2018) that strengthens the likelihood of compassionate leaders adopting helping behaviors geared toward developing their team. Resources, as defined by Halbesleben et al. (2014, p. 1138) are "anything perceived by the individual to help attain his or her goals," and, in this context, perseverance can be conceptualized as a resource that enables compassionate leaders to better achieve their objective of assisting the team in fulfilling its developmental needs. More specifically, perseverance facilitates crossing the metaphorical Rubicon, i.e., the transition from merely being inclined to help team members develop their capabilities to actively engaging in the process of providing help (Poulin, 2017). To substantiate this effect, we draw on the action-phase model of goal pursuit (Gollwitzer, 2012; Gollwitzer et al., 2004).

This model suggests that both the type of goal selected and personal commitment to that goal are important determinants of whether an individual takes the actions necessary for goal attainment. Goal pursuit occurs in two distinct phases. The first phase is motivational and deliberative, involving the individual's consideration of which goals to prioritize and act upon. In the implemental phase, the individual is committed to a goal and puts it into action. The decision to act on a selected goal, often referred to as the Rubicon, marks the separation between these two phases (Gollwitzer, 2012). The action-phase model explains the factors that make leaders with a compassionate inclination more likely to translate their compassionate motivation, desires, and feelings into concrete actions directed at the team's development.

In the deliberative phase, leaders recognize team member's development needs, invoking empathy and an inclination, motivation, or desire to help the team. However, this inclination is frequently in conflict with other desires and may coexist with various fears, hurdles, and forms of resistance (Gilbert & Mascaro, 2017). First, leaders must pursue valued goals beyond those related to team development, and the demands of daily work may compromise the practice of compassion, such as having the capacity and time to respond to the team's development needs (Thomas & Rowland, 2014). Engaging in team development-helping actions consumes time, attention, energy, and resources that could instead be directed toward solving other issues, handling other work challenges, and pursuing alternative work objectives. Compassionate leaders may, therefore, fear that their team development-helping behaviors might undermine efficiency and productivity (Simpson et al., 2020).

Second, expressions of compassion through helping behaviors may be perceived as risky by leaders because they might foster socio-emotional closeness between leaders and team members, making it more challenging to emphasize status differentials when necessary, such as in situations when leaders need to make tough decisions or implement sanctions (Bloom, 2017). Third, compassionate leaders may experience compassion fatigue (Boyatzis et al., 2006; Figley & Figley, 2017) associated with the responsibility for helping diverse team members – each with unique cognitive capacities, skills, and learning orientation – develop their capabilities frequently, over time. Considering the dynamic and multilevel nature of teams (i.e., individual, team, and organizational), along with the challenges they face, helping the team develop its capabilities is an ongoing endeavor that demands perseverance in the face of difficulties, setbacks, and opportunities (Shuffler et al., 2018).

In short, during the deliberative phase, the compassionate leader's desire to help the team may "exist uneasily alongside other desires" (Poulin, 2017, p. 358) and may collide with other inhibitors of compassion (Gilbert & Mascaro, 2017). Consequently, this desire may not translate into actual helping behaviors. We posit that perseverance serves as an agentic resource that empowers compassionate leaders to cross that metaphorical Rubicon (Gollwitzer, 2012; Gollwitzer et al., 2004). With perseverance, the pursuit of compassionate/helping goals becomes more manageable because it supports

leaders in feeling capable of simultaneously addressing other goals without forsaking their compassionate/helping ones. Conversely, a compassionate leader lacking perseverance may succumb to compassion fatigue and refrain from adopting team development-helping behaviors due to barriers such as fear, perceived resource limitations, a reluctance to exacerbate existing challenges, and resistance to diverting focus on established goal priorities (Gilbert & Mascaro, 2017). Without perseverance, the compassionate leader, even though inclined to be compassionate, may not translate these compassionate feelings and desires into concrete acts of assistance. In the absence of perseverance, the leader may incline toward compassion but fail to exhibit compassionate actions through the adoption of team development-helping behaviors (Simpson et al., 2020). From these arguments, we derive the next hypothesis:

Hypothesis 4. Leaders' perseverance moderates the positive relationship between leaders' dispositional compassion and their behaviors of helping with team development, and this relationship is stronger when compassionate leaders possess higher levels of perseverance.

The arguments presented above suggest that the functional role a compassionate leader performs by helping the team develop capabilities that promote team performance is contingent upon leader perseverance. In the absence of perseverance, a compassionate leader is less likely to assume the functional role that would contribute to team performance. Hence:

Hypothesis 5. The relationship between leaders' dispositional compassion and team performance, mediated by leader team development-helping behaviors, is conditional upon leaders' perseverance, with the mediated relationship being stronger when leaders' perseverance is high.

Studies overview

Two studies were conducted to test the hypothesized model. In the first study, a multi-source approach was adopted, involving a sample of 154 mid-level and top managers. These leaders were participants in a leadership development program that incorporated a 360º feedback exercise (before starting the program), which included various variables including those central to this study. Data from the targeted managers, as well as from their peers, subordinates, and supervisors were used. It is important to note that although the multi-source design was employed as a procedural remedy to mitigate common method bias (Podsakoff et al., 2024), all data were collected at a single point in time. Therefore, to address the issue of *temporal precedence* and gain insights, we conducted a multi-source longitudinal study involving 52 mid-level and top managers. These leaders were also participants in a leadership development program similar to the one described above. The primary distinction of this study was that participants took part in the same 360º feedback exercise two years after the initial round. For reasons explained below, only the left side of the hypothesized model was tested in the second study. Data from the targeted managers, as well as from their peers and subordinates, were used. Despite the relatively small sample size, the findings obtained are significant and warrant sharing. Moreover, the consistency in the findings across both studies regarding the conditional effect of leaders' dispositional compassion on team development-helping behaviors bolsters the robustness of our empirical evidence.

Study 1

Sample and procedures

The first study includes a sample of 154 mid-level and top managers (56.5% men; mean age: 40.12 years, SD: 7.31; 97.4% with a bachelor's degree or higher) broken down into two subsamples. The first subsample comprised 99 managers who worked for 86 organizations operating in several sectors (e.g., cork industry, healthcare, energy, banking, ceramics, wine production, grocery) in Portugal. These managers performed roles such as HR manager, chief technology officer, financial manager, and sales manager. The second subsample included 55 managers of a large multi-unit organization in Angola. They performed roles such as HR manager, department head, and provincial delegate.

All managers were participants in a leadership development program at a European business school. The program involved a 360º feedback exercise (before starting the program) in which participants invited (a) their direct supervisors, (b) all their team members (i.e., subordinates), and (c) peers who knew them well (and were able to be frank in their answers) to assess them on several variables, including the focal variables of this study. Data from peers and subordinates were anonymous. Although the managers from the two subsamples did not differ in terms of age, education, management level, non-calculative motivation to lead (included for control; see below), dispositional compassion, perseverance, and team developing behaviors, they did differ regarding gender (more women leading Portuguese versus Angola teams) and team performance (Portuguese teams described as slightly more effective). Considering these differences (see correlations in Table 2), as well as some cultural differences,[4] country was included for control.

Only managers who had been rated by the correspondent supervisor and at least two team members and two peers are included in this study. When the sample comprising only managers rated by at least three peers and three team members ($n = 134$) is used to test the hypothesized model, the findings are very similar. To increase statistical power, we kept the larger sample (i.e., $n = 154$) for analysis. In total, 154 targeted managers and the respective 154 supervisors, 738 team members (average: 4.79 per leader; SD: 2.58) and 1146 peers (average: 7.44 per leader; SD: 3.66) participated as raters. To mitigate common method bias, a "procedural remedy" was employed (Podsakoff et al., 2024), involving the measurement of different variables using data from different raters. Leaders' dispositional compassion was measured with data from peers, leaders' perseverance was measured with data from the targeted leaders, team development-helping behaviors were measured with data from subordinates, and team performance was measured with data from the supervisor of the team leader. Our rationale for these choices is explained next.

We measured *leaders' dispositional compassion* (which, as mentioned above, is the inclination not only to think and feel, but also to act in ways that express empathy, understanding support and help toward team members in need) using data from peers. Compassion, being a prosocial disposition, is typically expressed through feelings, attitudes, and behaviors, making it highly visible to acquainted and familiar with the target (Zimmerman et al., 2010). The *Emotions as Social Information* (EASI) approach further supports the notion that leader's emotional/compassionate expressions provide valuable information to observers (Van Kleef, 2009; van Kleef et al., 2015; see also Rego et al., 2019). Metaanalytical evidence (Connelly & Ones, 2010; Oh et al., 2011) suggests that observer ratings are robust predictors of behaviors, making them a valid and useful measure of dispositions (see also: McCrae & Weiss, 2007; Zimmerman et al., 2010). This approach also mitigates biases associated with self-reports, such as social desirability, self-presentation, and self-deception biases (Pommier et al., 2020; Zimmerman et al., 2010). Peers are less susceptible to these biases (Zimmerman et al., 2010), especially when their ratings are anonymous, as was the case in our research. Additionally, using multiple raters/peers enhances interrater reliability, thereby improving rating accuracy (Zimmerman et al., 2010). We chose not to use data from subordinates to measure leaders' dispositional compassion due to the possibility that compassionate leaders may sometimes need to make unpopular and tough

[4]https://www.hofstede-insights.com/country-comparison/angola,portugal/.

decisions perceived as uncompassionate by some team members. Moreover, leaders' self-reported dispositional compassion is prone to biases, whereas ratings from peers are generally more valid (Zimmerman et al., 2010).

Leaders' perseverance, on the other hand, was measured using data from the targeted managers, as this approach is considered valid (e.g., Duckworth et al., 2007). Some components of perseverance, such as resilience after setbacks, are largely internal and reflective, making them challenging for observers to accurately assess (McKee et al., 2018). Measuring compassion and perseverance through data from different sources is an important procedural remedy to mitigate the risk of common method variance (Podsakoff et al., 2024).

Team development-helping behaviors were measured with data from team members, who are the targeted beneficiaries of those behaviors. *Team performance* was measured with data from the supervisor of the team leader. It is reasonable to assume that the supervisor pays careful attention to the performance of the team led by the targeted team leader because team performance signals how effective the targeted team leader is. It is therefore likely that the supervisor pays attention to how effective the team is when assessing (e.g., through the performance appraisal system) the team leader's effectiveness. Team performance as measured by the team leader has limitations. First, the team leader is likely to assume that team performance is an indicator of his/her own performance, and such an association may make the leader provide biased ratings of team performance. Second, considering that perseverance was measured with data from the team leader, getting data about team performance from another source reduces common method bias.

Measures

A six-point scale (1: "The statement does not apply at all to the leader;" 6: " . . . applies completely . . . ") was used to measure all variables. To prevent response fatigue, all constructs were assessed with short measures (although comprising at least three items; Bandalos, 2018). All items were translated from English to Portuguese, and then back translated.

Leaders' dispositional compassion

Leaders' dispositional compassion ($\alpha = .88$, data from peers) was measured through three items from Shiota et al. (2006): (1) "The leader often notices followers who need help"; (2) "When the leader sees someone hurt or in need, he/she feels a powerful urge to take care of them"; (3) "The leader cares about followers who are more vulnerable." We did not include the other two items from Shiota et al. (2006) because one ("Taking care of others gives me a warm feeling inside") is not easily amenable to others' observation, and the other ("I am a very compassionate person") is redundant with the construct name (Boyle, 1991).

Leaders' perseverance

Leaders' perseverance was through the four items ($\alpha = .61$) from Duckworth and Quinn (2009): "I finish whatever I begin," "Setbacks don't discourage," "I am diligent," and "I am a hard worker." Although removing the second item allowed increasing reliability to .70, we retained all four original items for the construct to maintain content validity despite the lower Alpha coefficient of .61 (see also Cho & Kim, 2015, and Henson, 2001, for why, when considering cutoff values for α, "one size does not fit all," and values lower than .70 may be acceptable). The correlation between the two measures (i.e., three vs. four items) is .91, and the findings supporting the hypotheses are very similar when either three or four items are used. Literature (e.g., Rego et al., 2023; Rego, Vitória, et al., 2022) also has shown that the four-items measure is psychometrically valid.

Team development-helping behaviors

Team development-helping behaviors ($\alpha = .89$) were measured through the three items from Morgeson et al. (2010) focused explicitly on helping the team to develop team capabilities: (1) "The

leader helps the team learn from past events or experiences", (2) " . . . helps new team members to further develop their skills," and (3) " . . . helps new team members learn how to do the work."

Team performance

Team performance was measured with the three items ($\alpha = .90$) used by Schaubroeck et al. (2007): (1) "This team is very competent", (2) " . . . gets its work done very effectively," and (3) " . . . has performed its job well."

Controls

Several controls were included.[5] *Leaders' non-calculative* (i.e., selfless, prosocial, and communal; Badura et al., 2020; Chan & Drasgow, 2001) *motivation to lead* was included because such a prosocial motivation to lead encourages leaders to adopt more behaviors aimed at facilitating team development (Clark et al., 1986; Crocker & Canevello, 2008; Le et al., 2013). This variable was measured through three items adapted from Chan and Drasgow (2001; e.g., "The leader is willing to lead others even if there are no special rewards or benefits with that role"). A similar three-items measure was adapted by Wellman et al. (2019; see also Auvinen et al., 2020, for the validity of shorter versions of the Chan and Drasgow's measure). This variable was also measured with data from peers ($\alpha = .80$) because peers have many opportunities to observe if and why other managers are motivated or willing to accept leadership roles (e.g., peers often compete for leadership positions, thus observing who their competitors are and what they do). Self-reported data were not used to measure leaders' non-calculative motivation to lead because of the social desirability bias mentioned above. Data from subordinates may also be biased on account of implicit theories where they may suppose that, because such an individual is the *de facto* leader, he/she might have a specific and instrumental desire to assume such a role.

Leaders' *gender* was included because women vs. men tend to be more communal, more compassionate (Sprecher & Fehr, 2005). Social role theory (Eagly et al., 2012) also suggests that men and women are socialized to comply with prescribed gender roles, and the role ascribed to women is more communal and consistent with compassion. Leaders' *education* was included because more educated leaders may be more able to adopt team development behaviors. *Hierarchical level* (mid- vs. top-level) was included as it influences job content and the skills and competencies affecting leadership effectiveness. *Country* was included because of, as mentioned above, differences between the Portuguese and the Angolan subsamples.

Aggregating data

ICC(1) are .10, .10 and .13 (medium effect; LeBreton & Senter, 2008), respectively for leaders' dispositional compassion, leaders' non-calculative motivation to lead, and team development-helping behaviors by the leader. ICC(2) are .45, .53 and .35, also respectively. r_{wg} values (uniform distribution) are .80, .71 and .81, also respectively, representing strong interrater agreement (LeBreton & Senter, 2008). Although the ICC(2) is below the recommended cutoff (.60), this value does not prevent aggregation if aggregation is theoretically justified and r_{wg} is high (Bliese, 2000; Chen et al., 2004).

Discriminant analysis

Confirmatory factor analyses (through LISREL) showed that the five-factor model (dispositional compassion, perseverance, helping behaviors, and team performance, plus non-calculative motivation to lead as a control) fits the data satisfactorily ($\chi^2_{[94]}$ = RMSEA: .07; SRMR: .07; GFI: .90; CFI and IFI: .94) and better than several alternative models presented on Table 1. These results provide support for

[5]Including self-reported compassion as a control does not change the overall empirical pattern in both Study 1 and Study 2.

Table 1. Confirmatory factor analysis (comparing measurement models).

	Models		χ2 (*df*)	RMSEA	SRMR	GFI	CFI	IFI	$\Delta\chi^2$ (Δdf)
Study 1	5-factor	[Comp] [NCMTL] [Persev] [Help] [TPerf]	163.50 (94)	.07	.07	.90	.94	.94	-
	4-factor	[Comp, NCMTL] [Persev] [Help] [Tperf]	306.54 (98)	.12	.10	.81	.82	.82	143.04 (4)**
	4-factor	[Comp, Persev] [NCMTL] [Help] [TPerf]	210–99 (98)	.09	.09	.86	.90	.90	47.49 (4)**
	4-factor	[Comp] [NCMTL] [Persev] [Help, TPerf]	467.03 (98)	.16	.13	.75	.68	.69	303.53 (4)**
	3-factor	[Comp, Help, TPerf] [NCMTL] [Persev]	746.33 (101)	.20	.16	.64	.44	.45	582.83 (7)**
	2-factor	[Comp, NCMTL, Persev] [Help, TPerf]	656.05 (103)	.19	.16	.67	.52	.53	492.55 (9)**
	1-factor	[Comp, NCMTL, Persev, Help, TPerf]	934.29 (104)	.23	.18	.58	.28	.29	770.79 (10)**
Study 2	5-factor	[Comp – T1] [NCMTL – T1] [Persev – T1] [Help -T1] [Help -T2]	116.94 (94)	.07	.08	.81	.94	.94	-
	4-factor	[Comp – T1, NCMTL – T1] [Persev – T1] [Help – T1] [Help -T2]	143.81 (98)	.09	.10	.78	.88	.89	25.84 (4)**
	4-factor	[Comp – T1, Persev – T1] [NCMTL – T1] [Help – T1] [Help – T2]	146.07 (98)	.10	.11	.76	.87	.88	29.13 (4)**
	4-factor	[Comp – T1] [NCMTL – T1] [Persev – T1] [Help – T1, Help – T2]	153.09 (98)	.11	.10	.76	.85	.86	36.96 (4)**
	3-factor	[Comp – T1, NCMTL – T1, Persev – T1] [Help – T1] [Help – T2]	171.06 (101)	.12	.12	.73	.81	.82	54.12 (7)**
	2-factor	[Comp – T1, NCMTL – T1, Persev – T1] [Help – T1, Help – T2]	207.52 (103)	.14	.13	.69	.72	.73	90.58 (9)**
	1-factor	[Comp – T1, NCMTL – T1, Pers – T1, Help – T1, Help – T2]	353.63 (104)	.22	.20	.53	.33	.36	236.69 (10)**

For each study, $\Delta\chi^2$ for each model reflects its deviation from the factor-model presented in the first line.
Comp = Compassion; NCMTL = Non-calculative motivation to lead; Persev = Perseverance; Help – Helping behaviors; TPerf = Team performance; T1/T2 = Time 1/Time 2.
*$p \leq .05$. ** $p \leq .01$ (two-tailed).

Table 2. Means, standard deviations and correlations (study 1).

Variables	*M*	*SD*	1	2	3	4	5	6	7	8	9
1. Country[a]	-	-	-								
2. Leaders' gender[b]	-	-	.22**	-							
3. Leaders' education[c]	2.40	.64	−.11	.00	-						
4. Management level[d]	-	-	−.11	.13	−.03	-					
5. Leaders' non-calculative motivation to lead	4.63	.55	.15	−.10	.16	−.04	(.80)				
6. Leaders' dispositional compassion	4.81	.43	-.08	−.23**	.21*	.07	37**	(.88)			
7. Leaders' perseverance	5.10	.50	.07	.07	.09	−.14	−.04	.04	(.61)		
8. Team development-helping behaviors	5.16	.46	.00	.02	.16*	−.24**	.12	.24**	.08	(.89)	
9. Team performance	4.80	.67	−.19*	−.06	.11	.07	.05	.18*	−.07	.21**	(.90)

$N = 154$. Reliabilities are on the diagonal in parentheses.
[a]0: Portugal, 1: Angola.
[b]0: woman, 1: man.
[c]1: No college degree, 2: A bachelor's degree, 3: A master's degree or equivalent, 4: A terminal degree (e.g., PhD).
[d]0: midlevel management, 1: top management.
*$p \leq .05$. ** $p \leq .01$ (two-tailed).

Table 3. Bootstrap regression analysis (5000 samples; Model #7, Hayes 2018) for testing the moderated mediating model (study 1).

	Mediator: team development-helping behaviors							Dependent variable: team performance						
Predictors	*B*	*SE*	*t*	*ULCI*	*LLCI*	*F*	R^2	*B*	*SE*	*t*	*ULCI*	*LLCI*	*F*	R^2
						*3.96***	*.18*						*2.44**	*.10*
Country[a]	−.05	.08	−.68	−.21	.10			−.24*	.12	−2.02	−.47	−.01		
Gender of the leader[b]	.11	.08	1.47	−.04	.26			−.01	.11	−.12	−.24	.21		
Leaders' education[c]	.06	.06	1.01	−.05	.17			.05	.09	.55	−.12	.22		
Management level[d]	−.28**	.09	−3.21	−.45	−.11			.15	.13	1.12	−.11	.41		
Leaders' non-calculative motivation to lead	.02	.07	.34	−.11	.16			.00	.11	.04	−.20	.21		
Leaders' dispositional compassion	.25**	.09	2.74	.07	.44			.16	.14	1.13	−.12	.45		
Leaders' perseverance	−.02	.07	−.26	−.16	.13			-	-	-	-	-		
Compassion * perseverance	.48*	.19	2.54	.11	.85			-	-	-	-	-		
Team development-helping behaviors	-	-	-	-	-			.29*	.12	2.33	.04	.53		

$N = 154$.
[a]0: Portugal, 1: Angola.
[b]0: woman, 1: man.
[c]1: No college degree, 2: A bachelor's degree, 3: A master's degree or equivalent, 4: A terminal degree (e.g., PhD).
[d]0: midlevel management, 1: top management.
*$p \leq .05$. ** $p \leq .01$ (two-tailed).

the discriminant validity of study measures and, when considered alongside the procedural remedy mentioned above, help mitigate concern regarding common source bias.

Results

Table 2 displays the means, standard deviations and correlations. Leaders' non-calculative motivation correlates positively with leaders' dispositional compassion. Additionally, leaders' dispositional compassion shows positive correlations with team development-helping behaviors and team performance, while team development-helping behaviors correlate positively with team performance.

We tested the hypothesized model through the PROCESS macro (model #7; Hayes, 2018). The findings (Table 3) suggest that both leaders' dispositional compassion and the interaction between leaders' dispositional compassion and leaders' perseverance predict team development-helping behaviors. The interaction term predicts 3.7% of unique variance of team development-helping behaviors ($F = 6.44$, $p = .01$).

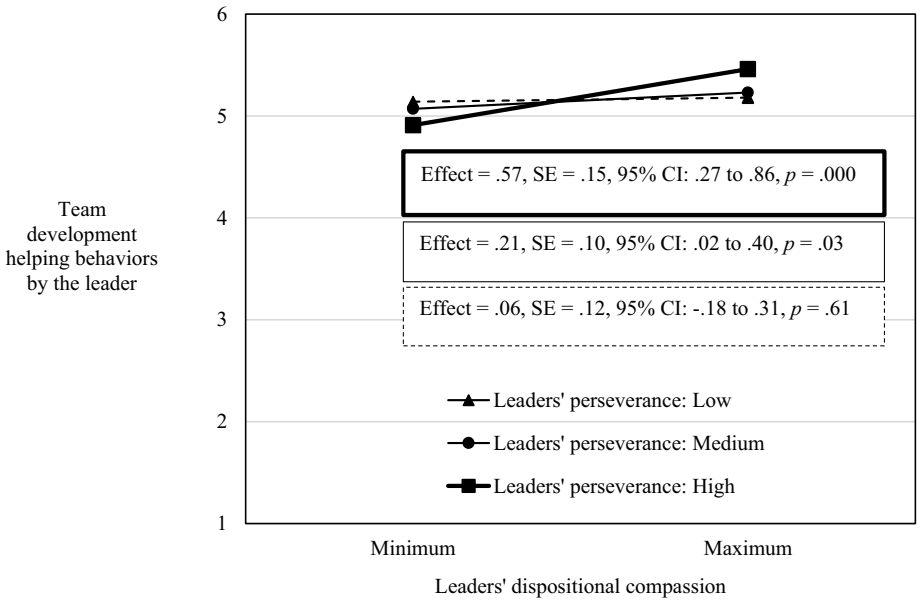

Figure 2. Conditional effects of leaders' dispositional compassion on team development-helping behaviors (study 1).

The effects of leaders' dispositional compassion on team development-helping behaviors vary depending on the level of leaders' perseverance: (a) *low* perseverance: effect = .06, SE = .12, 95% CI: −.18 to .31, $p = .61$; (b) *medium* perseverance: effect = .21, SE = .10, 95% CI: .02 to .40, $p = .03$; (c) *high* perseverance: effect = .57, SE = .15, 95% CI: .27 to .86, $p = .000$. Figure 2 illustrates this interaction pattern. The highest level of team development behaviors by the leader emerges when both leaders' dispositional compassion and leaders' perseverance are middle or high. The effect of leaders' dispositional compassion on team development-helping behaviors increases as leaders' perseverance also increases, and it is significantly positive only when leaders' perseverance is medium or high. Therefore, H4 is supported and H1 is supported when leaders have a medium or high level of perseverance.

The findings also indicate that team development-helping behaviors predict team performance (effect: .29; SE: .12; 95% CI: .04 to .53, $p = .02$), thus supporting H2. Although the direct effect of leaders' dispositional compassion on team performance is not significant (effect: .16, SE: .14; 95% CI: −.12 to .45, $p = .26$), the indirect effect is significant under conditions of high and middle leader perseverance: (a) *low perseverance* (effect: .02, SE: .03, 95% CI: −.05 to .09); (b) *middle perseverance* (effect: .06, SE: .03, 95% CI: .01 to .14); (c) *high perseverance* (effect: .16, SE: .07, 95% CI: .05 to .32). The index of moderated mediation is .14 (SE: .07; 95% CI: .03 to .30). Therefore, H5 is supported and H3 is supported when the leaders have middle or high perseverance.

Discussion

Our findings suggest that compassionate leaders promote team performance by helping the team develop team capabilities, although such an effect is conditional on leaders' perseverance. Although this evidence supports almost all hypotheses (H1 is supported only when leader perseverance is medium or high), all data were collected at a single point in time, and thus the method does not support causality. It is possible, for example, that peers have rated a leader's dispositional compassion because of the team development-helping behaviors that they observe in such a leader. To address the issue of temporal precedence, a multi-source longitudinal design was developed (Study 2) to test the

conditional effect of leaders' dispositional compassion (T1) on team development-helping behaviors (T2) as moderated by leaders' perseverance (T1).

Before proceeding, we clarify that considering the modest number of supervisors who rated the targeted managers on T2 ($n = 39$; this is mainly explained by the significant number of managers of the sample with top positions), Study 2 doesn't test the right part of our hypothesized model (team development behaviors → team performance). While acknowledging this limitation, we consider that the findings for the left side of the model are significant enough to warrant communication. Moreover, even though the conditional effect of leaders' dispositional compassion on team development behaviors by the leader is understudied, the relationship between team development behaviors and team performance is established in the literature (Dyer et al., 2013; Shuffler et al., 2018; Zaccaro et al., 2001). Findings from the sample of 39 leaders corroborate this evidence: team development behaviors (as reported by subordinates on T2) predicts team performance (as rated by the targeted managers' supervisors on T2) after controlling for team performance as measured on T1: $\beta = .42$, $t = 2.76$, $p = .01$, $\Delta R^2 = .17$ (F change: 7.66, $p = .01$). This empirical pattern is similar when team development behaviors as measured on T1 is the predictor: $\beta = .41$, $t = 2.70$, $p = .01$, $\Delta R^2 = .17$ (F change: 7.30, $p = .01$).

Study 2

Method

Study 2 comprised a sample of 52 mid-level and top managers (67.31% men; mean age: 39.17 years, SD: 6.17; all having a bachelor's degree or higher) who participated in a leadership development program like that mentioned in Study 1. The program involved the same 360º feedback exercise mentioned earlier, which these managers participated at in two points in time (T1 and T2) separated by a two-year interval. The inclusion criteria for analysis were as follows: Only managers who (1) were leading the same team at both T1 and T2, and (2) who rated themselves and were rated by at least two peers and two subordinates at T1, and were rated by at least two subordinates at T2, were considered for analysis. As a result of this selection process, the initial sample of 76 managers was reduced to 52. No significant difference was found between the selected group and the initial sample (i.e., $n = 76$) in terms of age, gender, education, non-calculative motivation to lead, perseverance, and team development-helping behaviors. Only a small difference was observed for leaders' dispositional compassion (T1; 5.01 vs 4.73; $t = 2.85$, $p = .01$).

Data were therefore collected from the target managers ($n = 52$) for measuring perseverance, T1, their peers ($n = 469$) to measure leaders' dispositional compassion and non-calculative motivation to lead, T1 (average: 9.02 per leader; SD: 5.82), and their subordinates ($n = 235$; average: 4.52 per leader, SD: 1.87; and $n = 215$; average: 4.13 per leader SD: 2.29) to measure team development-helping behaviors by the leader (in, respectively, T1 and T2). The 52 managers represented 46 organizations operating in Portugal across various sectors (e.g., cork, energy, banking, ceramics, pharmaceutical industry, medical devices, healthcare, advertising, wine production). Their roles ranged from CFO and CTO to global marketing manager, sales manager, production manager, and brand manager.

The same measurement items from Study 1 were used for all variables. The Cronbach Alphas were 74/.86 (T1/T2) for leaders' non-calculative motivation to lead, .89/.91 for leaders' dispositional compassion, .58/.69 for leaders' perseverance (.72/.72 if the second item is removed), and .92/.80 for team development-helping behaviors by the leader. Although removing the second item for measuring leaders' perseverance allowed for an increase in reliability to .72 for both T1 and T2, we retained the original four items to maintain the construct's content, following the same procedure as in Study 1. The correlations between the measures with the four versus the three items were .79 and .92 ($p = .000$) for T1 and T2 respectively.

Aggregating data

ICC(1) are .10, .09 (medium effect; LeBreton & Senter, 2008), .16 (medium-large effect) and .25 (large effect), respectively for leaders' dispositional compassion (T1), leaders' non-calculative motivation to lead (T1), and team development-helping behaviors by the leader as measured on T1 and T2. ICC(2) are .49, .47, 47 and .59, also respectively. r_{wg} values (uniform distribution) are .77, .67, .82 and .90, also respectively, representing moderate-strong (.67) and strong interrater agreement (LeBreton & Senter, 2008). Although the ICC(2) is below the recommended cutoff (.60), this value does not prevent aggregation if aggregation is theoretically justified and r_{wg} is high (Bliese, 2000; Chen et al., 2004).

Discriminant analysis

Confirmatory factor analyses (through LISREL) showed that the five-factor model (leaders' dispositional compassion, T1; leaders' non-calculative motivation to lead, T1; leaders' perseverance, T1; team development-helping behaviors by the leader, T1 and T2) fits the data satisfactorily and better than several alternative models presented on Table 1. This evidence supports the discriminant validity of study measures and, together with the procedural remedy mentioned above and the longitudinal method adopted, attenuates concern regarding common source bias.

Results

Table 4 presents the means, standard deviations, and correlations. Both measures (T1 and T2) of the variables in our model, including the control (i.e., non-calculative motivation to lead), exhibit positive intercorrelations. Leaders' non-calculative motivation to lead, measured at T1, positively correlates with leaders' dispositional compassion measured at both T1 and T2. Additionally, leaders' non-calculative motivation to lead at T1 positively correlates with leaders' perseverance at T2 and team development-helping behaviors at T1.

We tested the conditional effect of leaders' dispositional compassion (T1) on team development-helping behaviors (T2) moderated by leaders' perseverance (T1) using the PROCESS macro (model #1; Hayes, 2018). Controls included leaders' gender, education, management level, non-calculative motivation to lead (T1), and team development-helping behaviors (T1). The findings (Table 5) suggest that the interaction between leaders' dispositional compassion (T1) and leaders' perseverance (T1) predicts team development-helping behaviors (T2) ($\Delta R^2 = .09$, $F = 6.50$, $p = .01$).

The effect of leaders' dispositional compassion (T1) on team development-helping behaviors (T2) becomes positive only at high levels of leaders' perseverance (T1): (a) *low* perseverance: effect = −.29, SE = .18, 95% CI: −.66 to .08, $p = .12$; (b) *medium* perseverance: effect = .20, SE = .16, 95% CI: −.12 to .52, $p = .22$; (c) *high* perseverance: effect = .68, SE = .29, 95% CI: .08 to 1.28, $p = .03$). The highest levels of team development-helping behaviors (T2) are observed when both leaders' dispositional compassion and leaders' perseverance are at their highest. This empirical pattern is illustrated in Figure 3, depicting the outcomes from the PROCESS macro analysis (model #1). Therefore, we find support for H4 and H1 when leaders exhibit a high level of perseverance.

Discussion

Our findings indicate that leaders' dispositional compassion is positively related to team development-helping behaviors by the leader, particularly when leaders demonstrate high levels of perseverance. The finding that this relationship turns negative when leaders' perseverance is low should be interpreted with caution, given the low significance level ($p = .12$) and the small sample size. We mention it here as a mere suggestion for a future research avenue. It is possible that leaders with high compassion but low perseverance might suffer from "compassion fatigue" (Boyatzis et al., 2006; Figley & Figley, 2017), making them less effective in sustaining team development over time – a dynamic not captured

Table 4. Means, standard deviations and correlations (study 2).

Variables	*M*	*SD*	1	2	3	4.1	4.2	5.1	5.2	6.1	6.2	7.1	7.2
1. Leaders' gender[a]	-	-	-										
2. Leaders' education[b]	1.37	.53	−.06	-									
3. Management level[c]	-	-	−.04	−.33*	-								
4.1. Leaders' non-calculative motivation to lead (T1)	4.54	.47	−.14	−.16	.03	(.74)							
4.2. Leaders' non-calculative motivation to lead (T2)	4.69	.68	−.21	−.05	−.07	.62**	(.86)						
5.1. Leaders' dispositional compassion (T1)	4.73	.43	−.15	−.13	.12	.54**	.34*	(.89)					
5.2. Leaders' dispositional compassion (T2)	4.82	.54	−.24	−.03	−.19	.43**	.69**	.52**	(.91)				
6.1. Leaders' perseverance (T1)	4.93	.48	−.11	.01	.16	.07	.08	.06	.12	(.58)			
6.2. Leaders' perseverance (T2)	5.10	.57	.06	.05	.12	.29*	.25	.18	.19	.56**	(.69)		
7.1. Team development-helping behaviors (T1)	5.13	.49	.35*	.09	−.11	.31*	.04	.14	−.04	.11	.17	(.92)	
7.2. Team development-helping behaviors (T2)	5.27	.43	.28*	.10	−.21	.23	.17	.09	.13	.01	.18	.52**	(.80)

$N = 52$. Reliabilities are on the diagonal in parentheses.
[a]0: woman, 1: man.
[b]1: A bachelor's degree, 2: A master's degree or equivalent, 3: A terminal degree (e.g., PhD).
[c]0: midlevel management, 1: top management.
*$p \leq .05$. ** $p \leq .01$ (two-tailed).

Table 5. Bootstrap regression analysis (5000 samples; Model #1, Hayes 2018): how leaders' dispositional compassion predicts team development behaviors (T2) as conditional on leaders' perseverance (study 2).

	Dependent variable: team development behaviors (T2)						
Predictors	*B*	*SE*	*t*	*ULCI*	*LLCI*	*F*	R^2
						*3.68***	*.41*
Gender of the leader[a]	.18	.11	1.51	−.06	.43		
Leaders' education[b]	−.01	.11	−.13	−.23	.20		
Management level[c]	−.17	.11	−1.56	−.39	.05		
Team development-helping behaviors (T1)	.34**	.12	2.78	.09	.59		
Leaders' non-calculative motivation to lead (T1)	.09	.14	.66	−.19	.37		
Leaders' dispositional compassion (T1)	.13	.15	.86	−.17	.42		
Leaders' perseverance (T1)	.07	.11	.60	−.16	.29		
Compassion (T1) * Perseverance (T1)	.97*	.38	2.55	.20	1.74		

$N = 52$.
[a]0: woman, 1: man.
[b]1: A bachelor's degree, 2: A master's degree or equivalent, 3: A terminal degree (e.g., PhD).
[c]0: midlevel management, 1: top management.
*$p \leq .05$. ** $p \leq .01$ (two-tailed).

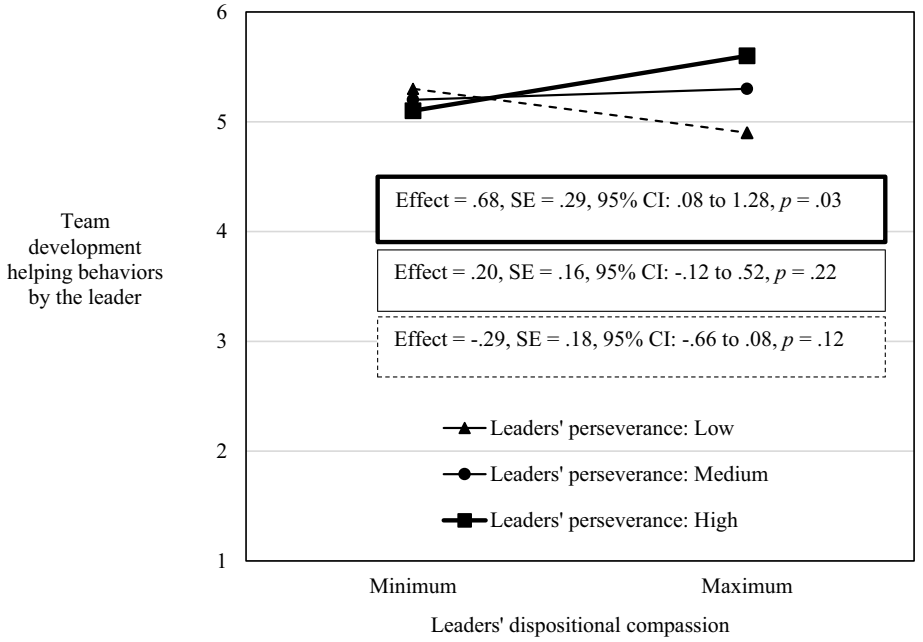

Figure 3. Conditional effects of leaders' dispositional compassion on team development-helping behaviors (study 2).

in the design of Study 1. Future research, employing larger sample sizes, may further investigate this hypothesis. Additionally, while Study 2 addresses the issue of temporal precedence, it falls short of establishing causality. This underscores the importance of conducting future research using experimental designs to better ascertain causative links. Nonetheless, the consistency of these findings with those of Study 1 lends considerable validity to our research.

Overall discussion

Our research advances three main findings. First, overall, our study highlights the relevance of leaders' dispositional compassion even in situations that do not involve significant suffering. We encourage future research in this domain to explore how, why, and when leaders' dispositional compassion manifests and produces outcomes in conditions that, while not involving extreme suffering, address important needs of organizational members.

Second, compassionate leaders may enhance (if they are *also* perseverant; see below) team performance by facilitating the development of team capabilities. These findings contribute to the existing literature by demonstrating that leaders' compassion may not only influence organizational compassion practices (by promoting humanistic policies, routines, communication, etc.), but may also yield tangible benefits for team performance. This contribution is significant as the impact of leaders' dispositional compassion on team performance outcomes has been relatively understudied. As suggested by K. S. Cameron et al. (2004), without demonstrated "pragmatic" benefits, compassion is unlikely to attract much scholarly or practitioner interest. Moreover, our findings have practical implications, particularly for compassionate leaders concerned about potential negative effects on team performance when expressing compassion. Our study suggests that they can actually foster team performance by expressing compassion through helping the team develop its capabilities. However, and this is our third contribution, our research also found that the effect of compassionate leaders on team performance through team development-helping behaviors is conditional on leaders' level of perseverance. Perseverance plays a crucial role in enabling compassionate leaders to engage in actions aimed at their team's development. Without adequate perseverance, compassionate leaders may encounter difficulties in overcoming associated costs, obstacles, and challenges (Batson, 2017; C. D. Cameron, 2017; Poulin, 2017), potentially reducing their long-term commitment to helping team members. One possible explanation for this conditionality is compassion fatigue (Boyatzis et al., 2006; Figley & Figley, 2017): leaders lacking perseverance may find it challenging to sustain development-focused behaviors over time. These leaders might feel "trapped" in the compassion-performance tension, as discussed earlier (Gardner & Mortensen, 2022; Mortensen & Gardner, 2022). Faced with pressure from various sources (e.g., executives), to foster performance and overwhelmed by responsibilities toward other stakeholders, these leaders may deplete the resources needed to support their teams. Future longitudinal studies could further investigate this topic by including a measure that captures the "fatigue" experienced by leaders in their efforts to assist their teams in developing necessary capabilities.

Indirectly, our research supports the action-phase model of compassion, and Poulin's (2017, p. 364) assertion that "the links between compassion and helping behavior are far from absolute." Although compassion may predict helping, it does not inevitably lead to helping behaviors. "To help or not to help," as Poulin's (2017) work poses the question, depends on the compassionate leaders' perseverance. It is perseverance that increases the likelihood of compassionate leaders engaging in helping actions despite the associated costs, difficulties, and obstacles (Batson, 2017; C. D. Cameron, 2017; Poulin, 2017). Expending time, efforts, and energy to help develop team capabilities may be exhausting and divert energy from the leader's other goals. Without the "strength of will" (Duckworth, 2016), compassionate leaders may feel incapable of fulfilling their inclination to assist their team meeting unmet needs, including the need to develop the necessary capabilities for team tasks (Boyatzis et al., 2006; Oveis et al., 2010).

Limitations and future studies

Our research has several limitations that future studies could address to provide greater clarity to the literature on leader dispositional compassion. First, the data used in our two studies was obtained from a 360º feedback tool utilized within the context of two leadership development programs. Although all participants were encouraged to include feedback from all

subordinates and well-acquainted peers, the data may suffer from selection bias. Moreover, some measures exhibit limitations in terms of content validity. Although the psychometric properties of the scales we employed appear satisfactory, future studies could incorporate measures with enhanced content validity. For instance, leaders' dispositional compassion could be assessed using multidimensional measures (e.g., Pommier et al., 2020). Future studies might also consider including helping behaviors aimed at addressing team members' needs beyond those related to team development. Objective metrics of team performance (e.g., sales, profits) could also be adopted. Despite incorporating non-calculative motivation to lead, a prosocial-oriented motivation, as a control, our 360º feedback tool did not allow for the integration of other relevant controls, such as servant leadership. Although nearly all operationalizations of this leadership approach do not explicitly include compassion (Eva et al., 2019; R. Liden et al., 2008, 2015), servant leadership entails serving team members, which includes caring for and empathizing with them. It is worth noting, however, that while servant leadership is more behaviorally oriented (Eva et al., 2019; Van Dierendonck, 2011), we have treated compassion as a disposition. Therefore, dispositional compassion may be considered an antecedent of servant leadership (Eva et al., 2019). Nonetheless, future studies could also incorporate other leadership "styles" such as empowering leadership (Arnold et al., 2000) and humility in leaders (Owens et al., 2013) for control, as these leadership "styles" are likely to encourage leaders to assist their teams in developing competencies and capacities. In summary, future studies could examine whether leaders' dispositional compassion predicts *unique* variance of team development-helping behaviors after controlling for other relevant leadership styles and leaders' dispositions.

Second, the methods employed in both studies do not establish causality. Although this limitation is partially addressed in Study 2 (where the independent and dependent variables were collected at two different points in time, separated by two years) for the moderated relationship between leaders' dispositional compassion and team development-helping behaviors, that study did not examine the relationship between development-helping behaviors and team performance. For instance, it is plausible that ineffective teams prompt compassionate leaders, particularly those lacking perseverance, to perceive the costs of expending time, energy, and resources into developing team capabilities as outweighing the benefits. Additionally, leaders might express more compassion through team development-helping behaviors as a response to high team commitment and performance. Future studies could conduct experiments to test our hypotheses. Nevertheless, it is worth noting that this limitation is somewhat mitigated by the established relationship between team development behaviors and team performance documented in the literature (Dyer et al., 2013; Shuffler et al., 2018; Zaccaro et al., 2001).

Third, our research involves a single mediator, and no mediating mechanism is explored between team development-helping behaviors and team performance. Future studies could incorporate other mediators between leader's compassion and team performance, such as team members' thriving or engagement, as well as mediators between team development-helping behaviors and team performance, such as team psychological capital and tangible improvements in team capabilities.

Fourth, future studies might consider additional moderators for the relationship between leaders' dispositional compassion and team development-helping behaviors. Although the agentic nature of perseverance makes this "strength of will" an important enabler of compassionate responses to team members' needs (in this case, development needs), future research could explore other strengths such as courage, forbearance, approach motivation, resilience, and wisdom (Hougaard & Carter, 2022; Simpson et al., 2020). Practical wisdom, defined as "the ability to discern the significant aspects of a particular situation and to apply one's knowledge, experience, and values to decide, based on experience and learning, the right thing to do" (Meyer & Rego, 2020), p. 16; see also (Schwarz, 2011), appears especially promising as of a moderator. Compassionate leaders must also be wise to be effective (Simpson et al., 2024; Hougaard & Carter, 2022). Practical wisdom enables them to respond prudently, reflectively, and responsibly, considering situational nuances, the long-term consequences

of compassionate decisions, and the inherent paradoxes of organizational life (Hougaard & Carter, 2022; Rego, Cunha, et al., 2022). Conversely, compassionate but unwise leaders risk making imprudent, impulsive, or ill-considered decisions, potentially becoming overwhelmed by other's problems and neglecting their own responsibilities (Marques, 2010).

Team characteristics could also function as moderators. For instance, investigating whether compassionate leaders perform better in teams characterized by high task complexity and high interdependence would be valuable. Additionally, future research could explore whether team members who prioritize care as a moral foundation are more inclined to moralize a leader's dispositional compassion, leading to more positive responses to the leader (Fehr et al., 2015). Similarly, team members with a stronger moral identity may have their moral schema activated by a compassionate leader, potentially viewing the leader as a role model and responding more positively to their directives (Wang et al., 2021). Investigating these possibilities could provide valuable insights. Furthermore, future studies might examine not only the factors that enable compassionate leaders to assist their teams but also the "fears, blocks, and resistances" (Gilbert & Mascaro, 2017) they encounter.

Conclusion

Our research suggests that compassionate leaders *may* play a crucial role in promoting team performance by addressing team development needs through compassionate actions. However, this effect is contingent upon leaders also possessing perseverance. Mere inclination toward compassionate actions is insufficient for adopting team development-helping behaviors; perseverance is also necessary. Balancing these two dispositions can be particularly challenging due to the inherent tension between them, as discussed earlier in the paper (see, e.g., Mortensen & Gardner, 2022; Simpson et al., 2024). Our findings suggest, at least indirectly, that "good leaders" (Newstead et al., 2021) exhibit both compassion and perseverance. We believe our study contributes to a more nuanced understanding of how leading with compassion influences team performance. This underscores the importance of considering both dispositional compassion and perseverance when selecting and promoting leaders. The positive impact of dispositional compassion on team development and performance is more pronounced when leaders exhibit not only compassion but also perseverance.

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Consent to participate

Informed consent was obtained from all individual participants included in the study.

CRediT authorship contribution statement

Arménio Rego: Conceptualization, Methodology, Formal Analysis, Writing – Original Draft, Writing – Review & Editing, Project Administration, Funding Acquisition. **Ace Simpson**: Conceptualization, Writing – Review & Editing; **Miguel Pina e Cunha**: Conceptualization, Writing – Review & Editing, Funding Acquisition; **Tony Silard**: Conceptualization, Writing – Review & Editing; **Eduardo André da Silva Oliveira**: Methodology, Writing – Review & Editing. **Diórgenes Mamédio**: Writing – Review & Editing.

Data availability statement

Data are available upon request.

Ethics approval

The 360º tool was approved by the Ethics Committee of the first author's University (report number ESR 07/2017).

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