SPi | Journal Code: J O B | Article ID: 2 3 2 2 | Dispatch: 21.07.1 | CE: Silorio, Janine | No. of Pages: 17 | ME:

Received: 4 April 2017 | Revised: 22 June 2018 | Accepted: 26 June 2018

DOI: 10.1002/job.2322

RESEARCH ARTICLE

WILEY Journal of Organizational Behavior

The importance of group-focused transformational leadership and felt obligation for helping and group performance

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Summary

Leaders face a challenge to simultaneously motivate workgroups and the individuals within them. Recent criticisms highlight the need to deconstruct broad leadership constructs to offer better theoretical insight into the effects of specific leadership behaviors on groups versus individuals. We address this call by exploring the effects of group-focused and individual-focused aspects of transformational leadership. Applying social identity theory, we theorize that group-focused transformational leadership is key to fostering felt obligation, motivating helping behavior, and enhancing group performance, whereas individual-focused leadership may only foster helping when individuals also feel a sense of obligation toward their workgroup. In a field study of 260 employees reporting to 36 supervisors in a skilled trade company, we find support for these predictions using multilevel structural equation modeling and multilevel mixed effects modeling. Thus, group-focused (vs. individual-focused) transformational leadership and subsequent felt obligation are important antecedents for encouraging helping and, in turn, workgroup performance.

KEYWORDS

group performance, group-focused leadership, helping, individual-focused leadership, obligation, social identity theory, transformational leadership

1 | INTRODUCTION

With the ever-increasing use of team-based structures for task accomplishment, workgroup performance remains a critical concern in the management literature (Devine, Clayton, Philips, Dunford, & Melner, 1999; Lorinkova, Pearsall, & Sims, 2013; Mathieu, Maynard, Rapp, & Gilson, 2008). As articulated by Aristotle more than 2,000 years ago, however, group performance "is more than the sum of its parts" or, in the case of a group, the sum of individual contributions. As a result, leaders face the challenge to simultaneously motivate groups and the individuals comprising them (Chen & Kanfer, 2007; Chen, Kirkman, Kanfer, Allen, & Rosen, 2007; Dong, Bartol, Zhang, & Li, 2017; Hackman, 2002; Kozlowski & Bell, 2003; X.-H. Wang & Howell, 2010). Individual and group priorities, however, may differ. For example, an employee may opt to focus on his or her own tasks rather than help a coworker for the sake of the group's performance. It often falls upon the workgroup leader to strike a balance between motivating individuals and the workgroup as a whole (Dong et al., 2017).

Because it is composed of both group- and individual-focused elements, transformational leadership has the potential, among the numerous leadership approaches, to strike the appropriate balance for motivating both individuals and groups (Bass, 1985; ~~Conger & Kanungo, 1998;~~ Shamir, House, & Arthur, 1993). Unfortunately, despite theoretical advancements suggesting that transformational leadership operates at both individual and group levels (e.g., X.-H. Wang & Howell, 2010), the majority of the extant literature treats it as a unitary construct, which assumes, perhaps incorrectly, that higher levels of transformational leadership are always better for work-related outcomes (N. Li, Chiaburu, Kirkman, & Xie, 2013; Rafferty & Griffin, 2004; van Knippenberg & Sitkin, 2013; G. Wang, Oh, Courtright, & Colbert, 2011). Indeed, decades of overemphasis on the unitary construct have likely masked the unique contributions of more specific group- versus individual-focused leadership behaviors

(Bass, 1985; Schriesheim, Wu, & Scandura, 2009; Shamir et al., 1993; Yammarino & Bass, 1990), and scholars have called for more precise theorizing and empirical isolation of the effects at each level (e.g., Chen et al., 2007; Chen & Bliese, 2002; Dong et al., 2017; Schriesheim et al., 2009; X.-H. Wang & Howell, 2010; J. B. Wu, Tsui, & Kinicki, 2010). As noted by G. Wang et al. (2011), individual and group performance are likely "influenced by different factors and through different mechanisms" (p. 229). Exploration of these mechanisms will provide valuable insight into how transformational leadership may accomplish the all-important task of motivating both groups and individuals.

Thus, in response to these calls and consistent with van Knippenberg and Sitkin's (2013) suggestion about the need for a "creative destruction" of transformational leadership (p. 9), we follow similar trends in other leadership traditions (e.g., Bergeron, 2007; Nielsen, Bachrach, Sundstrom, & Halfhill, 2012; Sparrowe, Soetjipto, & Kraimer, 2006) to examine how group- versus individual-focused behaviors of transformational leaders influence followers.[1] Accordingly, the primary purpose of this study is to bring more insight to these issues by examining the different contributions of group- versus individual-focused transformational leadership on group performance by examining one mediating mechanism, individual helping behavior. In particular, we position helping as a mechanism that translates the effects of group-focused transformational leadership to group performance. As a form of contextual performance, helping is defined as "members' discretionary behaviors intended to benefit other workgroup members or the group as a whole" (Sparrowe et al., 2006, p. 1194) and reflects the extent to which individuals exert time and effort assisting coworkers in addition to performing their own tasks (e.g., lending a hand to a coworker who has fallen behind or staying late to cover a coworker's shift; Organ, 1988). A number of primary studies (Durham, Knight, & Locke, 1997; Hackman & Wageman, 2005; Podsakoff, MacKenzie, Moorman, & Fetter, 1990), as well as meta-analyses (Burke et al., 2006; LePine, Erez, & Johnson, 2002), point to leadership behaviors as important drivers of helping in workgroups. Unfortunately, however, results from initial studies examining the effects of group- versus individual-focused transformational leadership, although promising, do not yet converge in either conceptualization of the constructs or linkages with the outcome of helping (e.g., G. Li, Shang, Liu, & Xi, 2014; Liao & Chuang, 2007; X.-H. Wang & Howell, 2010; J. B. Wu et al., 2010; Zaccaro, Heinen, & Shuffler, 2009). For example, whereas there is evidence that *group-focused* transformational leadership is associated with helping behavior (X.-H. Wang & Howell, 2010), we do not yet have a conceptual understanding about how, or even if, *individual-focused* transformational leadership relates to individual followers' helping behavior. This understanding will provide both practical and theoretical insights about the strategies leaders should use to motivate followers to help one another, when indeed this behavior is desired and/or necessary for proper group functioning.

Additionally, we aim to bring theoretical clarity on another specific intervening mechanism—felt obligation toward the workgroup. Applying social identity theory (SIT; Tajfel, 1979), we theorize about the distinct identities fostered in employees by group- versus individual-focused leadership behaviors. We argue that group-focused leadership facilitates helping and subsequent group performance in part because it instills a sense of obligation toward one's group members. Felt obligation is a reflection of a group-oriented (i.e., collective) identity, which can function to overcome self-interest and encourage more helping (Grant & Patil, 2012). Thus, we also expect that felt obligation will moderate the effect of individual-focused leadership on individual helping behaviors, such that individuals who experience high levels of both individual-focused leadership and felt obligation will be more likely to help their coworkers.

In taking this approach, we first contribute to the leadership literature by answering calls to provide more contextual specificity on transformational leadership theory (Schriesheim et al., 2009; van Knippenberg & Sitkin, 2013; Yammarino & Bass, 1990). Extending the literature on dual-focused transformational leadership (e.g., Dong et al., 2017; Kark & Shamir, 2002; X.-H. Wang & Howell, 2012), we apply SIT to theorize about and test the effects of both group- and individual-focused transformational leadership behaviors on outcomes. Namely, we build on X.-H. Wang and Howell's (2010) work, following Dong et al.'s (2017) multilevel approach, to hone in on the critical role of group-focused transformational leadership in fostering both helping and group performance. Questions linger about the best measurement and analytical approach to capture each of these dimensions and their outcomes. Research has just begun to utilize distinct, level-specific measures of group- versus individual-focused transformational leadership (e.g., Dong et al., 2017; X.-H. Wang & Howell, 2010, 2012), rather than simply comparing results when using individual responses versus aggregates of the same measure (e.g., Liao & Chuang, 2007). Thus, we aim to contribute to the transformational leadership literature by providing insights on the dual-focused model in terms of both theory and measurement.

We make a second contribution by bridging the dual-focused transformational leadership and helping literatures, explaining how group-focused leadership enables helping and subsequent group performance. By articulating and empirically demonstrating the role of felt obligation to the workgroup as an underexplored mechanism, we extend findings of past research, answering the question of how group-focused transformational leadership behaviors influence helping and group performance (e.g., Podsakoff et al., 1990; X.-H. Wang & Howell, 2010, 2012). We further bridge these areas of research by exploring the boundary conditions under which individual-focused leadership influences helping.

2 | THEORY AND HYPOTHESES

2.1 | Distinguishing between group- and individual-focused transformational leadership

Extant literature on transformational leadership has been dominated by the full-range leadership theory (i.e., "the 4 I's model"; Antonakis & House, 2002; Bass & Avolio, 1995), with the dual-focused model of transformational leadership (e.g., Dong et al., 2017; X.-H. Wang &

[1]Although we do not always specify the term "transformational," this is the type of group- versus individual-focused leadership to which we refer throughout the manuscript.

Howell, 2010, 2012; J. B. Wu et al., 2010) gaining momentum over the last decade. These two theoretical approaches are closely related, describing the same construct in slightly different ways. Thus, we rely on both frameworks to inform our work. The "4 I's"—individualized support, inspirational motivation, intellectual stimulation, and idealized influence—are generally accepted as the four broad categories of transformational behaviors (see Antonakis & House, 2014, and Rafferty & Griffin, 2004, for extensions). These categories constitute ways through which leaders may affect followers' motivation and value alignment, but they largely ignore the level at which they operate (i.e., group or individual; Schriesheim et al., 2009). Extending this model, the dual-focused model distinguishes group-focused from individual-focused leader behaviors, highlighting distinct effects on individual and group outcomes (X.-H. Wang & Howell, 2010).

Drawing on SIT (Tajfel, 1979), scholars have mapped dimensions of transformational leadership to each level, suggesting that such leaders influence followers by fostering both a sense of individual and collective identity (e.g., Ashforth & Mael, 1989; Kark & Shamir, 2002; Stam, Lord, van Knippenberg, & Wisse, 2014; Tse & Chiu, 2014). Although we do not explicitly measure or test hypotheses about identity fostered by leaders, we build on prior research clarifying this linkage (e.g., Tse & Chiu, 2014) and examining the link between identity and helping (e.g., Johnson & Lord, 2010; Newman, Miao, Hofman, & Zhu, 2016; Tse & Chiu, 2014) to propose our hypotheses. An individual identity motivates followers to think and behave on their own behalf, as an independent entity, whereas a collective identity motivates them to think of themselves as a part of a larger entity. Thus, collective identity is particularly conducive to employees engaging in behaviors to benefit the workgroup (Cheek, 1989; Cheek & Briggs, 1982; Johnson & Lord, 2010; Tajfel & Turner, 1985).

Some dimensions of transformational leadership are more group focused and are thought to be naturally aligned with fostering a collective identity (such as inspirational motivation and idealized influence). Thus, with this conceptual alignment, it seems that these behaviors would motivate employees to transcend their own interests for the functioning and well-being of the workgroup (Howell & Shamir, 2005; Kark & Shamir, 2002; N. Li et al., 2013; Stam et al., 2014; Tse & Chiu, 2014), partly because these leadership behaviors result in greater voice among peers, trust, support, and concern for group well-being (Ashforth & Mael, 1989; Hogg, 2001; Hogg & Terry, 2000; Hogg, van Knippenberg, & Rast, 2012; Stam et al., 2014; J. B. Wu et al., 2010).

Other dimensions of transformational leadership are more individual focused and have been shown to foster relational and/or individual identities among employees (Kark & Shamir, 2002). Due to this conceptual alignment, we suggest that these individual-focused leadership behaviors will place emphasis on the interdependency one has with their transformational leader (Kark, Shamir, & Chen, 2003; Steffens, Haslam, & Reicher, 2014; Steffens, Schuh, Haslam, Pérez, & van Dick, 2015) and on one's own unique characteristics, needs, and outcomes, rather than commonalities and dependencies shared with the group (Johnson & Lord, 2010; Johnson, Selenta, & Lord, 2006).

In sum, we extend X.-H. Wang and Howell (2012) to theorize that group-focused, but not individual-focused leadership, is likely to facilitate each employee's collective identity, a critical part of which is a sense of obligation toward the workgroup (Erlandsson, Björklund, & Bäckström, 2017). In turn, such employees are likely to consider behaviors that contribute to the group overall, such as helping. For instance, Rafferty and Griffin (2004) found a positive relationship between inspirational communication and helping, but not between individualized support and helping, implying that positive messaging about the work unit and the organization (i.e., group-focused leadership) is what motivates individual employees to engage in helping, rather than individual-focused leadership. In a similar manner, X.-H. Wang and Howell (2012) found empirical support for a positive relationship between group-focused transformational leadership and group performance. Thus, we position group-focused transformational leadership as the key driver of group-focused outcomes because of its conceptual alignment with a collective ~~sense~~ and other extant work aligning this dimension with group-focused outcomes (X.-H. Wang & Howell, 2012; J. B. Wu et al., 2010).

As noted by J. B. Wu et al. (2010), group-focused leadership "is based on the idea of average leadership style, a concept that implies that leaders view group members as a whole and treat each in the same fashion" (p. 92). Behaviors that comprise group-focused leadership direct attention toward the needs of the group as a whole, emphasizing the identity of that group rather than each individual within it (Dansereau, Alutto, & Yammarino, 1984; Dong et al., 2017; Kerr & Schriesheim, 1974; J. B. Wu et al., 2010; Yammarino & Bass, 1990). In line with recent work (e.g., N. Li et al., 2013), we conceptualize group-focused transformational leadership as leader behaviors that emphasize *teambuilding*, *articulating a compelling group vision*, and *fostering acceptance of group goals*. These three dimensions correspond with the inspirational motivation and idealized influence components of the full-range model (Dong et al., 2017; Kark & Shamir, 2002; N. Li et al., 2013; G. Li et al., 2014; Podsakoff et al., 1990; Rafferty & Griffin, 2004; X.-H. Wang & Howell, 2010; Zhang, Li, Ullrich, & van Dick, 2015). Although other dimensions could be part of group-focused leadership as well (e.g., role modeling; Dong et al., 2017), we limit our focus to these three because they are the most clearly tied to collective, group-focused concerns.

In contrast, consistent with our positioning of individual-focused leadership as a style that emphasizes individual needs and priorities, we include two dimensions to define it—*individualized support* and *intellectual contribution*. We also acknowledge that other dimensions of transformational leadership are relevant to a leader holding this type of individual focus (e.g., setting high expectations, fostering individual skill development, and personal recognition; Dong et al., 2017; X.-H. Wang & Howell, 2010), but we follow Kark and Shamir (2002) in our conceptualization of the construct. Figure 1 summarizes our proposed conceptual model, which we describe in more detail as we develop our hypotheses below. F1

2.2 | Group-focused transformational leadership, helping, and group performance

A group-focused transformational leader communicates the importance of group performance, facilitates the development of shared values and beliefs, and inspires unified effort toward group goals (Ashforth & Mael, 1989; Cheek & Briggs, 1982; Kark & Shamir,

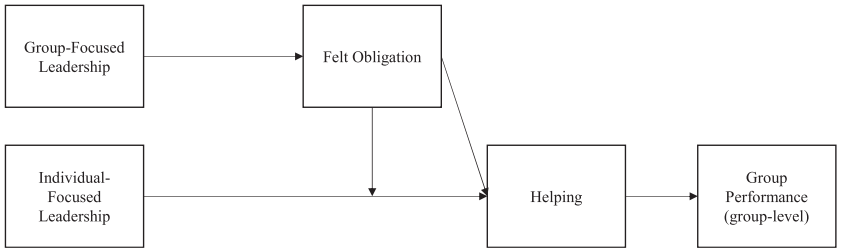

FIGURE 1 Full proposed model

2002; Tajfel, 1979; Tajfel & Turner, 1985; C.-H. Wu, Liu, Kwan, & Lee, 2016). As noted by Mumford and Strange (2002), the creation and communication of a shared team goal provides a structure for interpretation of how individual work relates to the group's overall goals, thus encouraging, energizing, and enabling individuals to work toward collective accomplishment of shared goals (G. Li et al., 2014; Rafferty & Griffin, 2004; X.-H. Wang & Howell, 2010). In line with research integrating SIT and transformational leadership theory, when leaders emphasize these group-oriented priorities, they elevate the status of the group in the eyes of the employees (Ashforth & Mael, 1989; Tse & Chiu, 2014; X.-H. Wang & Howell, 2012). Subordinates are then likely to evaluate themselves and their actions within the broader context of the workgroup and invest resources to contribute to the group's overall performance (Cheek, 1989; Cheek & Briggs, 1982). Similarly, group-focused leaders emphasize each member's belonging and obligation to the group through symbolic and inspirational messaging, which facilitates increased coordination and collaboration among workgroup members in support of the group's mission, thus leading to high performance overall (Ashforth & Mael, 1989; G. Li et al., 2014; Rafferty & Griffin, 2004; X.-H. Wang & Howell, 2010). Accordingly, we hypothesize:

Hypothesis 1a. *Group-focused transformational leadership is positively related to group performance.*

One specific way through which group-focused leadership likely facilitates group performance is through the encouragement of helping behaviors. From a theoretical point of view, helping is not typically defined by formal role requirements (van Dyne & LePine, 1998) and, as such, cannot be easily enforced by supervisors or the employing organization. Yet helping appears to be important to the proper functioning of workgroups and indeed has been positioned as a critical group function, fostering high levels of group performance (Choi, 2009; George & Jones, 1997).

We position helping as a key mechanism through which group-focused transformational behaviors may enhance group performance. That is, the leader's consistent focus on group performance goals likely increases the salience of those goals (perhaps as opposed to individual performance goals), which is likely to create a norm of helping one another to achieve those goals. A group-focused leader highlights each individual's role as a member of the group and consistently motivates and equips employees to transcend immediate personal goals for the sake of the common good (Choi, 2009; Podsakoff et al., 1990; Richardson & Vandenberg, 2005; Sparrowe et al., 2006; G. Wang et al., 2011; H. Wang, Law, Hackett, Wang, & Chen, 2005; J. B. Wu et al., 2010; Zhu & Akhtar, 2014). In turn, a group in which members help one another is likely to accomplish the group's goals, resulting in higher group performance (LePine & Van Dyne, 2001).

Despite some evidence to the contrary for noninterdependent teams (e.g., Bergeron, 2007; Podsakoff & MacKenzie, 1994; Viswesvaran & Ones, 2000), helping behaviors contribute to overall group performance in teams with at least a moderate level of task interdependence (Bachrach, Powell, Collins, & Richey, 2006; George & Jones, 1997; Nielsen et al., 2012; Saavedra, Earley, & van Dyne, 1993). Namely, helping a coworker is likely to streamline workflow processes, redistribute tasks to ~~avoid or~~ prevent delays in task completion, and contribute to timely, high-quality completion of the overall project (Porter, 2005; Porter et al., 2003; Porter, Gogus, & Yu, 2011). Therefore, we formally hypothesize a mediated relationship between group-focused transformational leadership and group performance through helping behavior.

Hypothesis 1b. *Helping mediates the relationship between group-focused transformational leadership and group performance.*

2.3 | The role of felt obligation

2.3.1 | Felt obligation as mediator of the effect of group-focused leadership on helping

One way group-focused transformational leadership likely works to motivate helping and subsequent group performance is by fostering a sense of obligation (or felt responsibility) toward the workgroup (Blau, 1964; Organ, Podsakoff, & MacKenzie, 2006; J. B. Wu et al., 2010). Felt obligation to one's workgroup reflects the extent to which an individual has a collective identity (Erlandsson et al., 2017; Leavitt, Reynolds, Barnes, Schlipzand, & Hannah, 2012). That is, a sense of obligation is typically directed toward the entity with which individuals identify most strongly (Leavitt et al., 2012; Stam et al., 2014; C.-H. Wu et al., 2016). Individuals who strongly identify with the workgroup are likely to be motivated to contribute and fulfill their responsibilities to their group. We expect the visionary, group-focused messages of a group-focused transformational leader to serve as a contextual foundation upon which a sense of obligation to one's group may develop. As employees strive to align with a group-focused leader's expectations, they develop and internalize an obligation to contribute to the group. Additionally, through teambuilding behaviors and fostering acceptance of workgroup goals, leaders shift members' identities and priorities to become increasingly team directed (Organ et al., 2006), thus increasing the salience of felt obligation to the group. In turn, group members who have a strong sense of obligation to their group likely feel a need to contribute and reciprocate benefits they receive

from being a part of it, and are thus motivated to engage in behaviors aimed at promoting workgroup well-being and success (i.e., helping; Blau, 1964).

> **Hypothesis 2.** *Felt obligation mediates the positive relationship between group-focused transformational leadership and helping.*

Together, Hypotheses 1 and 2 form a serial mediation model, in which group-focused leadership impacts group performance via obligation and helping behaviors.

2.3.2 | Felt obligation as moderator of the effect of individual-focused leadership on helping

In contrast to group-focused leadership, individual-focused leadership likely contributes to instilling a relational and/or individual identity among followers, as the leader emphasizes individual needs and concerns in a dyadic relationship. As a result of this conceptual alignment, we do not expect individual-focused leadership, on its own, to relate to helping because this type of leader does not emphasize anything that would consistently motivate employees to consider its importance. Instead, we only expect this type of leadership to motivate followers to help one another when it is coupled with higher levels of felt obligation toward the workgroup. When obligation is present and individual-focused leadership increases, an employee likely has a healthy balance of prioritization on both his or her own well-being and the well-being of the group, due to the collective identity reflected in felt obligation to the group (C.-H. Wu et al., 2016). This balance is likely to motivate employees to contribute to the group through helping. In contrast, when individuals feel less obligated to their workgroup, increasing frequency of individual-focused leadership behaviors is not likely to encourage employees to devote resources to anything not directly linked to their duty to the leader or themselves. Under these conditions, helping may be seen as counter to one's own priorities if decisions must be made between devoting resources to the group or one's own priorities when one's felt obligation to the group is lower (Kanfer & Ackerman, 1989; Lord, Brown, & Frieberg, 1999).

> **Hypothesis 3.** *Felt obligation moderates the relationship between individual-focused leadership and helping, such that the relationship is only positive and significant when felt obligation is higher.*

3 | METHOD

3.1 | Sample and procedures

We conducted a field study to test the hypothesized relationships. We sampled supervisors and frontline employees of a large skilled trade company in the mid-Atlantic United States. At the time of the data collection, each supervisor was in charge of one project with one work crew. The work crews ranged in size from three to 12 employees and included electricians, data technicians, fire alarm specialists, and helpers. In all projects, the workgroup goal was timely and efficient completion of the project. Crew members worked on some aspects of the job independently (e.g., installing switches) and collaborated on other aspects (e.g., commercial panel wiring). Crew members were paid individually (by the hour), and they did not receive any workgroup performance incentives.

In an attempt to reduce common source bias (Podsakoff, MacKenzie, & Podsakoff, 2012), we utilized different sources and different times for data collection. Members of the research team visited work sites to invite employees to complete paper surveys assessing their supervisor's leadership behaviors (plus demographic data). These surveys were either returned to the research team in closed envelopes on site (employees could opt out of the survey by returning an envelope with an uncompleted survey) or mailed to the research team in a postage-prepaid envelope. Employee surveys were precoded to reflect work sites, which facilitated matching employee and supervisor data across surveys. Additionally, employees were asked to include their email as a contact point for the research team and indicate their agreement for the research team to follow-up with one more survey.

Approximately 2 weeks after the initial paper surveys were collected, employees were emailed a link to an online survey, through which they assessed their level of felt obligation toward the work unit and their own helping behavior on the current project. At that same time, supervisors were emailed a link for an online survey, through which they assessed their workgroup's overall performance, and provided demographics and project-specific information (length and number of employees supervised). In order to boost participation, we offered supervisors and employees who completed all surveys a chance to win one out of 10 $20 gift cards.

We distributed surveys to all company employees, totaling 347 frontline employees and 63 supervisors. After deleting records with missing data and surveys for which we had no matching data from supervisors, our final sample of participants included 260 employees (75% participation rate) and 36 supervisors (57% participation rate). This sample included 92% male employees and 97% male supervisors, as expected by the nature of the industry. The average supervisor age was 40.12 years (*SD* = 9.72), and the average employee age was 37.65 years (*SD* = 13.45). The average project length was 6.11 months (*SD* = 3.12), and average number of employees per supervisor was 7.22.

3.2 | Measures

Consistent with typical challenges in field-based research, we were limited in the number of items and types of response scales we could use with management's approval. We provide justification for our choice of scales below. Unless otherwise noted, all variables were measured with a 5-point Likert-type scale (5 = *completely agree*), which was the request of management.

3.2.1 | Group- and individual-focused transformational leadership

Following published work, which has examined group- and individual-focused transformational leadership as distinct constructs (e.g., Dong et al., 2017), we assessed these two constructs using items from the original Podsakoff et al. (1990) transformational leadership measure, which has been validated across contexts and cultures (e.g., Dong et al., 2017; G. Li et al., 2014; Podsakoff et al., 1990). In particular,

we used 14 items in total, appropriately aligning the referent of the items ("our supervisor" for group-focused items and "my supervisor" for individual-focused items; Dong et al., 2017; J. B. Wu et al., 2010). In selecting the dimensions and items for measuring transformational leadership, we were guided by both theoretical reasoning and practical purposes. In terms of conceptual grounding, our goal in selecting an appropriate measurement was for a scale to reflect the specific, distinct concepts of group- versus individual-focused transformational leadership. For this reason, we opted not to measure the more ambiguous dimensions that could be interpreted as targeting both the group and the individual—such as "providing an appropriate model" from the original Podsakoff et al. scale and as used by Dong et al. (2017). In terms of practicality, we were also limited by the participating organization as to the number of items we could include in the survey.

To assess group-focused transformational leadership, we mirrored the approach of Dong et al. (2017), using eight items (α = 0.95), to measure articulating a group vision (three items:e.g., "Our supervisor provides us with a compelling vision to work towards"), fostering acceptance of group goals (two items;e.g., "Our supervisor is able to get others to commit to what we need to accomplish in our unit"), and teambuilding (three items:e.g., "Our supervisor fosters collaboration among his/her subordinates"). For individual-focused transformational leadership, we used six items (α = 0.93) assessing individualized support (three items;e.g., "My supervisor behaves in a manner which is thoughtful of my personal needs") and intellectual stimulation (three items;e.g., "My supervisor challenges me to think about old problems in new ways"). We used this measure at the individual level, consistent with its conceptualization. To determine whether either of these could be considered at the group level (aggregation), we computed interrater agreement for the items. For group-focused leadership, the average $r_{wg(j)}$ across all groups was 0.78 (range of group $r_{wg(j)}$'s: 0.31 to 0.99, with 69% (25) of the groups above 0.70, plus six groups between 0.60 and 0.70[2]). Further, the intraclass correlation (ICC1) was 0.07, and the estimate for the reliability of the group means (ICC2) was 0.35. These values provided enough justification to warrant aggregation of group-focused leadership to the team level.[3] Thus, we calculated an individual-level and a group-level score for each participant. We did the same calculations for individual-focused leadership, which suggested greater within-group variance in this variable (ICC1 = 0.02; ICC2 = 0.12; average $r_{wg(j)}$ = 0.68, range of group $r_{wg(j)}$'s: 0.19 to 0.87). Consistent with our theorizing, we analyzed this variable at the individual level only. We report additional validation analyses on these measures to increase confidence in them, using a separate sample, in Appendix A. Those analyses (e.g., establishing the extent to which our measures correlated with those used by X-.H. Wang & Howell, 2010) showed that the dimensions we chose were appropriate and well-aligned with X.-H. Wang and Howell's (2010) measurement strategy as well.

3.2.2 | Helping behavior

Employees reported the extent to which they helped their group members using three items from Podsakoff, Ahearne, and MacKenzie (1997; α = 0.8[illegible]; e.g., "I help my colleagues if someone falls behind in his work"). We chose to use a self-report measure of helping behavior, reasoning that in the context of the skilled trade work, employees were not always side by side (i.e., employees working in separate rooms or on different floors) and were therefore not fully aware of the extent to which other workgroup members engaged in helping. To better reflect the self-assessment, we changed the referent shift from "members of my crew" in the original scale to "I" in the items that we used. In addition, in selecting the items for the measurement of helping, we only used those three items from the original scale that were relevant to our context and our conceptualization of helping. For these reasons, we omitted the four additional items from the original scale that reflected solving conflicts/disagreements with colleagues (e.g., "I try to act as a peacemaker when other colleagues have disagreements").

3.2.3 | Felt obligation to work unit

Employees reported the extent to which they felt obligation to their work unit using four items from Eisenberger, Armeli, Rexwinkel, Lynch, and Rhoades (2001; α = 0.9[illegible]; e.g., "I have an obligation to my work crew to ensure that I produce high-quality work on this project"). Following Yu and Frenkel (2013) and to be consistent with our sample context, we substituted "work crew" as the referent instead of the organization's name in the original scale, and we added the reference to the current project. We omitted three items from the original scale because those were not relevant to the participants' context (e.g., "I owe it to the team to do what I can to ensure that the team's customers are well-served and satisfied" was irrelevant as participant crews did not interact with customers).

3.2.4 | Group performance

Supervisors assessed their workgroup's performance on a four-item scale adapted from Tsui, Pearce, Porter, and Tripoli (1997; α = 0.87). Exemplar items include "This crew adequately completes work on the project" and "Work on this project meets all formal requirements of the job."

3.2.5 | Controls

We collected data on employee tenure with the supervisor and age (both in years) as well, because research suggests that more experienced employees are likely to be more familiar with their supervisor's policies, expectations, and leadership style, which may influence their reports of leadership style and felt obligation (Barling, Loughlin, & Kelloway, 2002). Tenure is also likely to reflect some informal hierarchy (e.g., employees who have more time working with a supervisor are likely to be more experienced, have better task skills, and/or have

[2]We conducted analyses with all the groups included and when dropping the groups with r_{wg} < 0.70 (this dropped 10 groups, including 66 individuals). The analyses were nearly identical for all hypothesis tests with only one exception (the helping ➔ performance link was not significant at Level 2).

[3]One reason for this somewhat low ICC2 might be the average group size (7.22 in our sample) was probably not big enough to result in large ICC2 values (Bliese, 2000). In addition, our sample participants worked under conditions of medium interdependence, which may have additionally attenuated the team-level agreement among members in their leadership assessment. The acceptable, but lower than usually reported, ICC2 values, however, make the tests of the group-level relationships somewhat conservative (Bliese, 2000; Srivastava et al., 2006).

a closer relationship with the supervisor) within each workgroup. There is also evidence to suggest that positive perceptions of others' behavior (including supervisors) increase with age (Sutter & Kocher, 2007). In addition, we measured employee task interdependence, using a two-item measure (α = 0.87) from Campion, Medsker, and Higgs (1993; "I cannot accomplish my tasks without information or materials from other members of my work group" and "My colleagues depend on me for information or materials needed to perform their tasks"). The average interdependence was 3.78 (*SD* = .49; response scale: 1–5, where 5 = *strongly agree*).[4] Interdependence is an important conceptual control variable for our model because, as past research suggests, workgroup interdependence may significantly influence the relationship between helping and group performance (Bachrach et al., 2006). In addition, the level of interdependence in a team is likely to be associated with how much a leader can influence the team members to help each other. If the work is not at least moderately interdependent, it might be difficult for employees to find practical ways to help each other or, perhaps, develop as cohesive of a group identity, as fostered by group-focused leadership. In the subsequent analysis, we estimated our hypotheses controlling only for interdependence, because age and tenure were not significantly correlated to helping, the focal dependent variable at the individual level (Becker, 2005). To be thorough, however, because age was correlated with helping at $p < 0.10$, we tested Hypothesis 3 both with and without age as a control, and the results were identical.

3.3 | Analyses

We first conducted multilevel confirmatory factor analysis (ML-CFA) of the three predictors of helping using individual-level scores for all variables (individual-focused leadership—six items, parceled into two factors; group-focused leadership—eight items, parceled into three factors; and felt obligation—four items)[5] to assess the empirical distinctiveness of our predictor variables, taking into account the clustering inherent in our data (Dyer, Hanges, & Hall, 2005). A three-factor model, with individual-level group-focused leadership modeled at both the between and the within level and individual-focused leadership and felt obligation modeled only at the within level, exhibited the best fit to the data, $\chi^2(24) = 48.72$, $p < 0.05$; RMSEA = 0.06; CFI = 0.97; TLI = 0.95; SRMR-within = 0.02; SRMR-between = 0.24 (see Table 1 for factor loadings).

We compared this baseline model to two additional models as follows. First, we compared it with a two-factor model, with group-focused leadership and individual-focused leadership loading onto one factor and modeled at both between and within levels and felt obligation modeled as a separate factor at the within level only. The fit of this model was slightly poorer than our baseline model, $\chi^2(31) = 73.57$, $p < 0.01$; RMSEA = 0.07; CFI = 0.95; TLI = 0.93; SRMR-within = 0.03; SRMR-between = 0.40. Next, we compared it with a three-factor model, with group-focused leadership and individual-focused leadership modeled at both the between and within level as separate factors and felt obligation modeled only at the within level as a distinct factor. This model also exhibited slightly poorer fit than our baseline model, $\chi^2(28) = 70.98$, $p < 0.01$; RMSEA = 0.08; CFI = 0.93; TLI = 0.91; SRMR-within = 0.03; SRMR-between = 0.40. Thus, with the support of these fit indices, we proceeded with our hypothesized three-factor multilevel measurement model of the predictors of helping.

TABLE 1 Standardized factor loadings from multilevel confirmatory factor analysis of hypothesized model

Parcel/item	Estimate		
Individual-focused leadership			
Individualized consideration	0.85**		
Intellectual stimulation	0.86**		
Group-focused leadership			
Goals	0.89**		
Vision	0.96**		
Teambuilding	0.85**		
Felt obligation			
Item 1	0.83**		
Item 2	0.94**		
Item 3	0.89**		
Item 4	0.82**		
Correlations of latent factors	1	2	3
1. Individual-focused leadership			
2. Group-focused leadership	0.93**		
3. Felt obligation	0.42**	0.44**	

**$p < 0.01$.

Before hypothesis testing, we also tested for the potential effect of common method variance (CMV) for all the variables that we used at the individual level (individual-focused leadership, obligation, and helping). Namely, we employed the marker variable technique (Lindell & Whitney, 2001), which advocates incorporating an additional variable in the study that is theoretically unrelated to at least one other variable of interest. Our control variable, task interdependence, fits this description because it is not theoretically related to the style of leadership reported by the employees. Therefore, we examined correlations between it and our other variables. As shown in Table 2, this variable was not significantly related to group-focused leadership at either level, nor was it associated with individual-focused leadership. This suggests that CMV may not be a significant concern in biasing our study results.

With only 36 supervisors at Level 2 and a comparatively small number of employees under each supervisor, our statistical power was small, which prevented us from fitting the whole model and testing all hypotheses at once with multilevel structural equation modeling (MSEM; Preacher, Zyphur, & Zhang, 2010; Preacher, Zhang, & Zyphur, 2011). We did try to test the full model, but it failed to converge due to having more parameters than sample size would allow. However, we were able to test Hypotheses 1 and 2 (considering group performance as outcome) using MSEM, which allowed us to consider both

[4]According to O*Net (Online Occupational Network, maintained by the Department of Labor), the electrical skilled trade work averages 76% interdependence, supporting our assertion that these groups were moderately interdependent.

[5]Because we were constrained by our small sample size and the correspondent unfavorable item-to-sample-size ratio, we utilized a parceling method to simplify our model when performing the CFA (N. Li, Zhao, Walter, Zhang, & Yu, 2015). In particular, we created three parcels for group-focused leadership by combining the items assessing the three different subdimensions and two parcels for individual-focused leadership.

TABLE 2 Descriptive statistics and correlations of study variables

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9
1. Age	37.65	13.45	-								
2. Tenure with manager	3.22	3.92	0.37**	-							
3. Task interdependence	3.77	0.50	0.06	0.11	(0.87)						
4. Group-focused leadership (group level)	4.40	0.27	0.14*	−0.04	−0.06	(0.90)					
5. Group-focused leadership (individual level)	4.40	0.70	0.20**	0.02	0.03	0.39**	(0.95)				
6. Individual-focused leadership	4.25	0.79	0.11†	0.02	0.03	0.32**	0.80**	(0.93)			
7. Obligation	4.20	0.85	0.13*	−0.04	0.17**	0.18**	0.40**	0.34**	(0.91)		
8. Helping	4.48	0.73	0.11†	−0.02	0.13*	0.15*	0.21**	0.09	0.39**	(0.87)	
9. Group performance (group level)	4.70	0.20	0.07	−0.03	0.17**	0.32**	0.12†	0.10	0.17**	0.17**	(0.87)

Note. N = 260 at individual level and N = 36 at group level; internal consistency reliabilities appear in parentheses along the diagonal; the correlations between group-level scores (group-focused leadership and group performance) and all other individual-level variables were calculated by assigning the same group-level score to the individual employee group members.

†$p < 0.10$.

*$p < 0.05$.

**$p < 0.01$.

within and between components of group-focused leadership in the full model.

We then tested Hypothesis 3 using Proc Mixed in SAS v9.4. This software uses random coefficient mixed effects multilevel modeling (MLM), and we specified our model using random intercepts only (not random slopes). Before creating the interaction term when testing Hypothesis 3, we group-mean-centered felt obligation and individual-focused transformational leadership for this hypothesis test because we were interested in individual perceptions relative to the rest of the group and wanted to control for the group mean values for each construct, to partition any variance out that related to a group's leader being particularly different than another group's leader. Thus, we reintroduced the group means of these variables back into the model as controls for these contextual characteristics (i.e., group mean levels of felt obligation and individual-focused leadership; Kreft & De Leeuw, 1998) and also controlled for the group mean of group-focused leadership.

4 | RESULTS

4.1 | Descriptive statistics

Table 2 presents the means, standard deviations, reliability coefficients, and zero-order correlations of the variables. When treated at the individual level, group-focused leadership strongly correlated with individual-focused transformational leadership (r = 0.79, $p < 0.01$); this correlation is consistent with past studies (e.g., Dong et al., 2017; G. Li et al., 2014). As could be expected, when treated as a group-level construct, the correlation between group-focused leadership and individual-focused leadership was significantly lower (r = 0.32, $p < 0.01$), reducing concerns about construct overlap. As shown in Table 2 (and in line with Hypotheses 1 and 2), the aggregated group-focused leadership was positively associated with felt obligation (r = 0.18, $p < 0.01$), helping (r = 0.15, $p < 0.05$), and group performance (r = 0.32, $p < 0.01$).

4.2 | Hypothesis testing

First, we tested Hypotheses 1 and 2 using MSEM in Mplus. Prior to testing the combined model, we conducted a preliminary test of Hypothesis 1a, which specified a positive direct relationship between group-focused transformational leadership and group performance. We modeled this relationship at the between level only, given that both constructs were conceptualized at the group level. Contrary to our hypothesis, group-focused transformational leadership was not significantly related to group performance (β = 0.18, ns).

Despite the nonsignificant effect, we proceeded to test the full mediation model proposed in Hypotheses 1 and 2, with obligation and helping as serial mediators between group-focused leadership and group performance and full mediation for every effect (see Figure 2). We specified a 2-1-1-2 model, with group-level group-focused leadership and group performance considered in the between model (Level 2) and individual-level group-focused leadership,[6] felt obligation, and helping considered in both the within and between models (Preacher et al., 2010; Preacher et al., 2011). The model fit very well, $\chi^2(10) = 7.47$, $p = 0.68$; RMSEA = 0.00; CFI = 0.99; TLI = 1.00; SRMR-within = 0.02; SRMR-between = 0.09. As predicted, group-focused leadership was significantly associated with obligation at the between level (β = 0.58, $p < 0.05$), controlling for task interdependence (β = 0.54, $p < 0.01$). In turn, obligation was significantly associated with helping (β = 0.58, $p < 0.01$), which, in turn, was significantly associated with group performance (β = 0.79, $p < 0.01$). The indirect effects were significant as well, with a total indirect effect at the between level from group-focused leadership to group performance of μ = 0.27 ($p < 0.05$; SE = 0.12; 95% CI [0.04, 0.49]). Furthermore, we uncovered significant effects at the within level, with group-focused leadership predicting obligation (β = 0.37, $p < 0.01$) and obligation predicting helping (β = 0.39, $p < 0.01$). The indirect effect at the within level was also significant from group-focused leadership

[6]Thank you to an anonymous reviewer for suggesting this adjustment to our analyses.

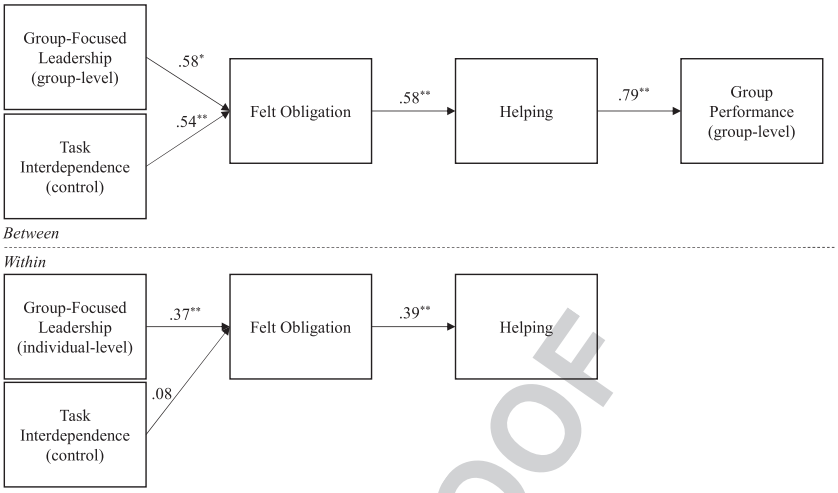

FIGURE 2 Multilevel structural equation modeling results for Hypotheses 1 and 2. Standardized coefficients presented. Total indirect effects for between-level model from group-level group-focused leadership to group performance: μ = 0.27* (*SE* = 0.12, 95% CI [0.04, 0.49]). Total indirect effects for within model from individual-level group-focused leadership to helping: μ = .14** (*SE* = 0.03, 95% CI [0.08, 0.20]). Overall fit: $\chi^2(10) = 7.47$, $p = 0.68$; RMSEA = 0.00; SRMR-within = 0.02; SRMR-between = 0.09; CFI = 0.99; TLI = 1.00

TABLE 3 Results of multilevel random coefficient modeling for helping (Hypothesis 3)

Predictor variable	Model 1	Model 2
Intercept	2.20* (0.92)	1.99* (0.94)
Task interdependence	0.16 (0.10)	0.17† (0.10)
Group mean of group-focused leadership (γ_{01})	0.69* (0.33)	0.84* (0.34)
Group mean of individual-focused leadership (γ_{02})	−0.39 (0.29)	−0.54† (0.30)
Group mean of felt obligation (γ_{03})	0.08 (0.16)	0.10 (0.16)
Individual-focused leadership (γ_{10})	−0.01 (0.06)	0.02 (0.06)
Felt obligation (γ_{20})	0.36** (0.06)	0.36** (0.05)
Felt obligation × IFL (γ_{30})		0.23** (0.07)
AIC	525.10	518.40
Pseudo R^2	0.16	0.20

Note. Level 1 *N* = 260; Level 2 *N* = 36; pseudo R^2 was estimated as the amount of total variance (i.e., both between- and within-group variances) in the dependent variable accounted for by all the variables in the model together. Unstandardized estimates are presented with standard errors in parentheses. All variables are analyzed at the individual level unless specified as "group mean of …." ~~IFL: individual-focused leadership; AIC: Akaike information criterion.~~

†$p < 0.10$.

*$p < 0.05$.

**$p < 0.01$.

to helping via obligation (μ = 0.14, $p < 0.05$; *SE* = 0.03; 95% CI [0.08, 0.20]). Thus, Hypotheses 1b and 2 were fully supported.

Next, Hypothesis 3 predicted that the individual-focused transformational leadership would influence helping, moderated by felt obligation toward the workgroup. We tested this hypothesis using MLM in SAS Proc Mixed. We included the group means of obligation, individual-focused leadership, and group-focused leadership as controls in the model, in addition to task interdependence. As seen in Table 3, Model 1, the main effect of felt obligation ($\gamma_{20} = 0.36$, $p < 0.01$) positively and significantly predicted helping. The main effect of individual-focused leadership was not significantly related to helping ($\gamma_{10} = -0.01$, [illegible]). In the next step of testing Hypothesis 3, we added the interaction term, which was positive and significant (Table 3, Model 2: $\gamma_{30} = 0.23$, $p < 0.01$). This provided initial support for Hypothesis 3.

To better understand the nature of the relationship, we plotted the interaction at ±1 *SD* of the mean of felt obligation. As seen from Figure 3, at high levels of felt obligation, helping was positively influenced by individual-focused leadership (simple slope: $b = 0.25$, $t = 2.60$, $p = 0.01$), whereas at low levels of felt obligation, the slope between individual-focused leadership and helping was significantly negative (simple slope: $b = -0.21$, $t = -2.56$, $p = 0.01$). Thus, Hypothesis 3 was fully supported.[7]

5 | DISCUSSION

We have argued for more theoretical precision, in both content and level, for transformational leadership. In a multisource and multilevel field study, we build on research integrating SIT (Tajfel, 1979) with the dual-focused transformational leadership perspective (e.g., X.-H. Wang & Howell, 2010). We position group-focused transformational leadership as the critical component of transformational leadership in

[7]We also ran all analyses without interdependence as a control, and most results were identical. However, the linkage between group-focused leadership and obligation was just outside of the typical significance criterion ($p = 0.06$). Thus, given the conceptual importance of interdependence and its significant correlation with helping, we report all results with it included in the models (Becker, 2005).

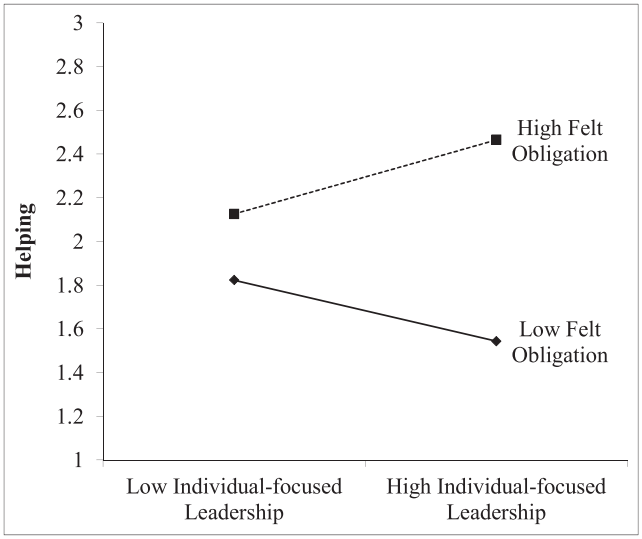

FIGURE 3 Two-way interaction between individual-focused leadership and obligation predicting helping (Hypothesis 3). Both simple slopes are significant at $p = 0.01$

fostering obligation to the workgroup, helping, and group performance. In short, our major finding is that group-focused leadership and subsequent felt obligation may indeed be the most critical priorities for leaders who wish to foster helping among members of a workgroup. We found strong mediation effects at both the within (individual) and between (group) levels of group-focused leadership using MSEM. We interpret these findings to suggest that both shared behavioral norms in the group and individual perceptions of leadership behaviors directed toward the group are important (i.e., Gonzalez-Mule, DeGeest, McCormick, Seong, & Brown, 2014). Thus, the target of leader behaviors (i.e., the group) may be more important to consider when studying these relationships, rather than the empirical level at which the construct of group-focused leadership is analyzed. On the contrary, on its own, without an instilled sense of felt obligation to the workgroup, individual-focused leadership appears to be insufficient (and even detrimental) to encourage helping in a workgroup.

5.1 | Theoretical implications

Our results advance the transformational leadership literature in several ways. First, we answer calls to provide more conceptual and empirical specificity for transformational leadership theory (Schriesheim et al., 2009; van Knippenberg & Sitkin, 2013; Yammarino & Bass, 1990). Extending the literature on dual-focused transformational leadership (e.g., Dong et al., 2017; Kark & Shamir, 2002; N. Li et al., 2013; X.-H. Wang & Howell, 2012), we apply SIT to theoretically explain the effects of group- versus individual-focused transformational leadership behaviors, thus adding to an important area in the transformational leadership literature (X.-H. Wang et al., 2011; J. B. Wu et al., 2010). This builds on Kark and Shamir (2002), answering calls to theoretically specify the levels at which leadership theory actually operates (Yammarino & Bass, 1990). Although we did not test SIT empirically, our theorizing is consistent with and builds upon other studies that do test the link between transformational leadership and identity (e.g., Tse & Chiu, 2014) and between identity and employee and group outcomes (e.g., Johnson & Lord, 2010; Newman et al., 2016; Tse & Chiu, 2014).

Furthermore, using contemporary multilevel and structural equation modeling methodologies to test the effects of both group- and individual-focused transformational leadership behaviors on outcomes at both levels, we provide clarity about how to measure and analyze group- versus individual-focused transformational leadership, including what dimensions make sense conceptually and empirically. Prior to X.-H. Wang and Howell (2010), tests of the dual-focused model of transformational leadership had only considered outcomes at one level, and there was no true multilevel measure (Schriesheim et al., 2009). We built upon Wang and Howell's work, following Dong et al.'s (2017) multilevel approach, to conceptualize group-focused transformational leadership as comprising three group-specific dimensions from the full-range transformational construct (articulating a group vision, fostering acceptance of group goals, and teambuilding) and two individual-specific dimensions (individualized support and intellectual stimulation). Using MSEM, we found empirical support for the importance of group-focused leadership as an antecedent of helping in the workgroup, and using MLM, we found that individual-focused leadership may only positively influence helping behaviors among group members who feel a sense of obligation to the group. Furthermore, it appears appropriate to assess group-focused leadership using a referent shift to the workgroup and to consider both within- and between-group variances in this construct.

Finally, our finding that felt obligation acts as a mediator of the effects of group-focused transformational leadership and a moderator of the effects of individual-focused transformational leadership contributes to both the helping and leadership literatures. By specifying how group-focused leadership fosters obligation, which in turn predicts helping and subsequent group behavior, we highlight an important mechanism bridging transformational leadership and helping (e.g., Podsakoff et al., 1990; X.-H. Wang & Howell, 2010, 2012). In contrast, when felt obligation is lower (which we found would likely occur when group-focused leadership is lower in testing Hypotheses 1 and 2), an individual-focused transformational leader may be less able to motivate helping behavior among individuals. Interestingly, although we did not explicitly hypothesize it, we found a significant negative relationship between individual-focused leadership and helping when felt obligation was lower, suggesting that some sort of group-focused leadership emphasizing individuals' obligation to the group may indeed be required to foster helping if the leader is also highly individually focused. If not present, helping may actually diminish in the workgroup. Our theorizing about group- versus individual-focused leadership using SIT may shed light on this unexpected finding. Namely, we suggested that individual-focused leadership may indeed foster a more individual identity. This result suggests that, in the absence of group-focused leadership and/or felt obligation (and corresponding collective identity), individual-focused leadership may even demotivate individuals from helping their teammates. Thus, our approach helps illuminate felt obligation as an important mechanism and boundary condition for group- and individual-focused leadership behaviors in impacting individuals and groups and suggests new avenues for future research (e.g., Chen et al., 2007; Dong et al., 2017; van Knippenberg & Sitkin, 2013; J. B. Wu et al., 2010). We concur that

the traditional, overarching transformational leadership construct, when treated as unitary and unilevel, may overlook some important nuances.

5.2 | Practical implications

Because managers have limited energy and resources, mastering both group- and individual-focused transformational leadership may not always be practical or perhaps even needed. Because group-focused leadership appears to be the most important transformational leadership factor to encourage obligation and helping, we suggest that this is an appropriate priority for leaders who cannot do both and who consider helping a valuable outcome. For instance, in larger or virtual workgroups where individual attention is hard to give, group-focused leadership may be a more efficient way to motivate the group to unite and contribute to overall group goals together. We also warn managers that in the absence of felt obligation, increases in individual-focused leadership may discourage employees from engaging in helping. This shows how an "average" score of transformational leadership (in particular, low group-focused leadership, which we revealed as an antecedent of felt obligation, and high individual-focused leadership) may actually be detrimental.

Practically speaking, managers who are concerned about improving helping within the work unit can consider their own behaviors to evaluate what messages they are sending about group-focused priorities. Evaluation of subordinate assumptions and group norms may also be valuable, while emphasizing teambuilding and workgroup goal clarification. Leaders may ask group members what they perceive as priorities, in terms of what types of helping are encouraged, or even needed. We found that helping was beneficial to group performance in the groups we studied, and we theorized that this would generalize to other groups who are at least moderately interdependent (George & Jones, 1997; Nielsen et al., 2012; Saavedra et al., 1993). Thus, even managers who do not consider helping a high priority might benefit from reevaluating that stance. In light of this finding, we advise that leadership strategies that prioritize a collective group concern be executed first to lay the foundation that would encourage employees to help others. These leadership strategies may take many tangible forms and need not exclude individual employee concerns. For example, a leader who emphasizes the potential of an individual employee to excel and promote quickly might contextualize that praise within the important impact that the group can make with that employee's group-focused contributions. Leaders might also foster a sense of obligation among employees toward the workgroup by highlighting the benefits of group membership, the value individuals receive from their workgroup, and normative expectations for strong group cultures.

5.3 | Strengths, limitations, and future directions

Advantages of this study include its multilevel design in a field setting, utilizing multiple sources of data across multiple time points. A separate validation study further confirmed the conceptualization of group-focused and individual-focused transformational leadership, demonstrating the robustness of our findings. However, our study did not employ a longitudinal design, so we lack evidence for the causal nature of the relationships found or assess change in leadership styles or effects of those over time. We can only discuss associations and possible implications of those associations.

We acknowledge that our focus on group- versus individual-focused transformational leadership behaviors did not allow for a comprehensive deconstruction of the entire transformational leadership construct, which includes other equally important dimensions, such as role modeling and individual skill development (Dong et al., 2017; X.-H. Wang & Howell, 2010). Also, because we did not assess both group- and individual-focused leadership at both levels, we cannot make conclusive inferences about the source of the differential effects we uncovered. To do that, we would need to assess both at the same levels. The SRMR-between values were higher than desired for our multilevel measurement model, which may indicate that group-oriented leadership is still perceived by each team member differently, even though there was enough agreement to justify considering it at the group level. This may limit our theoretical assumptions about our model. It could perhaps be remedied by including fewer or other dimensions at the group level, on which group members would exhibit more agreement.

A related source of concern might be the fact that all the participants in our study were from a single organization, employed in a single industry, and both the organization and industry are male dominated. Although this approach allowed us to increase the internal validity of the results, generalizability of our full model to different industries, particularly where female employees are better represented, might not be appropriate. Of course, many industries are still male dominated, including many STEM fields and skilled labor jobs, so managers in these industries may find particular value in our results.

Although we used supervisor ratings for group performance as a multisource dependent variable, all other variables were assessed by employee self-reports. Because supervisor ratings of group performance could also be biased in their own right, future studies should strive to include objective performance ratings. Although self-reports may be the best source of information on variables such as one's perceptions about the leader and one's own sense of obligation and helping behavior aimed at colleagues and the work unit, and despite the supportive CMV analyses we conducted, concern about method and self-enhancement biases is nevertheless warranted. We did take special precautions to minimize biases by temporally separating measures (through a two-wave data collection) and performing ML-CFAs and an additional validation study, which perhaps reduced the level of concern, but this cannot be eliminated without multisource reports of all the study variables. This may be a concern especially with variables such as helping, with respect to which individuals are asked to honestly report how much they do above and beyond their central job duties.

We were also limited in our ability to use anything other than agreement scales, per management request. We acknowledge research that finds that agreement scales may result in subordinates reporting their own conceptions of what leadership should be, rather than their actual observations of supervisor's leadership behavior (Lord & Mayer, 1993). To remedy this, whenever possible, future research should use frequency scales or other methods to more objectively assess the demonstration of specific leadership behaviors and associated variables, including helping.

Despite the above limitations, our results have a number of positive applications, both practical and theoretical, as well as providing an outline for future research. More research emphasizing the group- versus individual-focused behaviors (e.g., Dong et al., 2017; G. Li et al., 2014; J. B. Wu et al., 2010) for transformational leadership and other leadership styles (such as ~~LMX and~~ empowering or servant leadership) stands to add valuable insight to theory and practice. The transformational leadership area could lead the way across leadership research, as other areas have a similar overemphasis on one level of analysis. In a similar manner, the full-range model of leadership has been enriched by instrumental leadership, defined as "enactment of leader expert knowledge to ensure organizational goal attainment" (Antonakis & House, 2014, p. 749)[8] with potential implications of this leadership style at both group and individual levels. Yet research is still needed to differentiate and explain the idiosyncratic and joint effects of this and other leadership styles at different levels. This applies to the effects of differentiated individualized leadership behaviors as well, which may have different effects than even consistent individualized leadership behaviors (i.e., where everyone in the group receives the same treatment from the leader).

We also call for additional research on the explicit processes through which a broader range of leadership behaviors influences individual and group outcomes. For instance, instrumental leadership adds more task-oriented or initiating structure dimensions to the full-range leadership model, which can shed better insight into in-role and extra-role performance (Antonakis & House, 2014). Considering these dimensions at the group versus individual levels, as the dual-focused model of transformational leadership aims to do, would shed light on the way specific individual- and group-focused behaviors and outcomes are linked (Dong et al., 2017; X.-H. Wang & Howell, 2012). For example, individual-focused leaders who engage in skill development with subordinates might reduce the need for helping. Comparing differential effects of group- versus individual-focused leadership behaviors on other individual-level mechanisms leading to outcomes, such as helping and group performance, would also be valuable. These insights can only be achieved by considering more dimensions of leadership and outcomes at both levels.

Further, as Colquitt, Baer, Long, and Halvorsen-Ganepola (2014) noted, scholars should explicitly examine the exchange-related outcomes of certain leader behaviors, such as obligation, cynicism, quality of relationship, or engagement, rather than simply assuming we know what happens psychologically to induce desired behaviors. Focusing on characteristics of the follower as they engage with leaders may add insight to this (e.g., Howell & Shamir, 2005). Related to these ideas, group culture and cohesion are important mediators to consider in future research building on this work; highly cohesive groups likely have a strong culture of helping one another, and the influence of leadership may be less important than in less cohesive environments. An affiliation climate developing as a result of group-focused leadership may also be an important mechanism to consider (Li et al., 2014).

Finally, explicitly testing SIT by measuring collective, relational, and individual identities in conjunction with the above ideas would be valuable as well and would build on a steadily growing body of literature that combines SIT and transformational leadership to grow theory in this important area. For instance, Kark et al. (2003) found that overall transformational leadership (considered at the group level) was more strongly related to personal identification than social (i.e., group/collective) identity. Only one study to our knowledge provides empirical evidence of the linkage between group-focused aspects of transformational leadership and collective identity (Tse & Chiu, 2014), although there is strong theoretical basis for this linkage (X.-H. Wang & Howell, 2012). Thus, further deconstruction of the transformational leadership construct with SIT would provide much-needed empirical evidence on the nuances of these linkages. Finally, explicitly assessing resource allocation perceptions and strategies used by subordinates as they engage in-role versus extra-role behaviors would help shed light on follower reactions to a range of leader behaviors and the degree to which resources are split between extra-role and in-role performance (Kanfer & Ackerman, 1989).

In conclusion, continued efforts to hone our understanding of the differential effects of group- versus individual-focused leadership behaviors will serve to further advance this important conversation about how to simultaneously motivate and empower groups and the members within them. We urge researchers to build on our results to offer further theoretical and empirical precision about different leadership constructs and their differential relationships with constructs at group versus individual levels.

[8]We thank an anonymous reviewer for this suggestion.

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REFERENCES

Antonakis, J., & House, R. J. (2002). The full-range leadership theory: The way forward. In B. J. Avolio, & F. J. Yammarino (Eds.), *Transformational and charismatic leadership: The road ahead* (pp. 3–33). Amsterdam: JAI Press. https://doi.org/10.1108/S1479-357120130000005006

Antonakis, J., & House, R. J. (2014). Instrumental leadership: Measurement and extension of transformational–transactional leadership theory. *The Leadership Quarterly*, *25*, 746–771. https://doi.org/10.1016/j.leaqua.2014.04.005

Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review*, *14*, 20–39.

Bachrach, D. G., Powell, B. C., Collins, B. J., & Richey, R. G. (2006). Effects of task interdependence on the relationship between helping behavior and group performance. *Journal of Applied Psychology*, *91*, 1396–1405. https://doi.org/10.1037/0021-9010.91.6.1396

Barling, J., Loughlin, C., & Kelloway, E. K. (2002). Development and test of a model linking safety-specific transformational leadership and occupational safety. *Journal of Applied Psychology*, *87*, 488–496. https://doi.org/10.1037//0021-9010.87.3.488

Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.

Bass, B. M., & Avolio, B. J. (1995). *Multifactor leadership questionnaire*. Redwood City, CA: Mind Garden.

Bergeron, D. M. (2007). The potential paradox of organizational citizenship behavior: Good citizens at what cost? *Academy of Management Review*, *32*, 1078–1095. https://doi.org/10.5465/AMR.2007.26585791

Blau, P. (1964). *Exchange and power in social life*. New York: Wiley.

Burke, C. S., Stagl, K. C., Klein, C., Goodwin, G. F., Salas, E., & Halpin, S. M. (2006). What type of leadership behaviors are functional in teams? A meta-analysis. *The Leadership Quarterly*, *17*, 288–307. https://doi.org/10.1016/j.leaqua.2006.02.007

Campion, M. A., Medsker, G. J., & Higgs, A. C. (1993). Relations between work group characteristics and effectiveness: Implications for designing effective work groups. *Personnel Psychology*, *46*, 823–847. https://doi.org/10.1111/j.1744-6570.1993.tb01571.x

Cheek, J. M. (1989). Identity orientations and self-interpretation. In D. M. Buss, & N. Cantor (Eds.), *Personality psychology: Recent trends and emerging directions* (pp. 275–285). New York: Springer-Verlag.

Cheek, J. M., & Briggs, S. R. (1982). Self-consciousness and aspects of identity. *Journal of Research in Personality*, *16*, 401–408. https://doi.org/10.1016/0092-6566(82)90001-0

Chen, G., & Bliese, P. D. (2002). The role of different levels of leadership in predicting self- and collective efficacy: Evidence for discontinuity. *Journal of Applied Psychology*, *87*, 549–556. https://doi.org/10.1037//0021-9010.87.3.549

Chen, G., & Kanfer, R. (2007). Toward a system theory of motivated behavior in work groups. In B. M. Staw (Ed.), *Research in organizational behavior* (Vol. 27) (pp. 223–267). Greenwich, CT: JAI Press.

Chen, G., Kirkman, B. L., Kanfer, R., Allen, D., & Rosen, B. (2007). A multilevel study of leadership, empowerment, and performance. *Journal of Applied Psychology*, *92*, 331–346. https://doi.org/10.1037/0021-9010.92.2.331

Choi, J. N. (2009). Collective dynamics of citizenship behaviour: What group characteristics promote group-level helping? *Journal of Management Studies*, *46*, 1396–1420.

Colquitt, J. A., Baer, M. D., Long, D. M., & Halvorsen-Ganepola, M. D. K. (2014). Scale indicators of social exchange relationships: A comparison of relative content validity. *Journal of Applied Psychology*, *99*, 599–618. https://doi.org/10.1037/a0037049

Dansereau, F., Alutto, J., & Yammarino, F. (1984). *Theory testing in organizational behavior: The variant approach*. Englewood Cliffs, NJ: Prentice-Hall.

Devine, D. J., Clayton, L. D., Philips, J. L., Dunford, B. B., & Melner, S. B. (1999). Teams in organizations: Prevalence, characteristics, and effectiveness. *Small Group Research*, *30*, 678–711. https://doi.org/10.1177/104649649903000602

Dong, Y., Bartol, K. M., Zhang, Z.-X., & Li, C. (2017). Enhancing employee creativity via individual skill development and team knowledge sharing: Influences of dual-focused transformational leadership. *Journal of Organizational Behavior*, *38*, 439–458. https://doi.org/10.1002/job.2134

Durham, C. C., Knight, D., & Locke, E. A. (1997). Effects of leader role, team-set goal difficulty, efficacy, and tactics on team effectiveness. *Organizational Behavior and Human Decision Processes*, *72*, 203–231. https://doi.org/10.1006/obhd.1997.2739

Dyer, N. G., Hanges, P. J., & Hall, R. J. (2005). Applying multilevel confirmatory factor analysis techniques to the study of leadership. *The Leadership Quarterly*, *16*, 149–167.

Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. D., & Rhoades, L. (2001). Reciprocation of perceived organizational support. *Journal of Applied Psychology*, *86*, 42–51. https://doi.org/10.1037/0021-9010.86.1.42

Erlandsson, A., Björklund, F., & Bäckström, M. (2017). Choice-justifications after allocating resources in helping dilemmas. *Judgment and Decision making*, *12*, 60–80.

George, J. M., & Jones, G. R. (1997). Organizational spontaneity in context. *Human Performance*, *10*, 153–170. https://doi.org/10.1207/s15327043hup1002_6

Gonzalez-Mule, E., DeGeest, D. S., McCormick, B. W., Seong, J. Y., & Brown, K. G. (2014). Can we get some cooperation around here? The mediating role of group norms on the relationship between team personality and individual helping behaviors. *Journal of Applied Psychology*, *99*, 988–999. https://doi.org/10.1037/a0037278

Grant, A. M., & Patil, S. V. (2012). Challenging the norm of self-interest: Minority influence and transitions to helping norms in work units. *Academy of Management Review*, *37*, 547–568. https://doi.org/10.5465/amr.2010.0437

Hackman, J. R. (2002). *Leading teams: Setting the stage for great performances*. Boston: Harvard Business School Press.

Hackman, J. R., & Wageman, R. (2005). A theory of team coaching. *Academy of Management Review*, *30*, 269–287. https://doi.org/10.5465/AMR.2005.16387885

Hogg, M. A. (2001). A social identity theory of leadership. *Personality and Social Psychology Review*, *5*(3), 184–200.

Hogg, M. A., & Terry, D. J. (2000). Social identity and self-categorization processes in organizational contexts. *Academy of Management Review*, *25*, 121–140.

Hogg, M. A., van Knippenberg, D., & Rast, D. I. (2012). The social identity theory of leadership: Theoretical origins, research findings, and conceptual developments. *European Review of Social Psychology*, *23*(1), 258–304. https://doi.org/10.1080/10463283.2012.741134

Howell, J. M., & Shamir, B. (2005). The role of followers in the charismatic leadership process: Relationships and their consequences. *Academy of Management Review*, *30*, 96–112.

Johnson, R. E., & Lord, R. G. (2010). Implicit effects of justice on self-identity. *Journal of Applied Psychology*, *95*, 681–695. https://doi.org/10.1037/a0019298

Johnson, R. E., Selenta, C., & Lord, R. G. (2006). When organizational justice and the self-concept meet: Consequences for the organization and its members. *Organizational Behavior and Human Decision Processes*, *99*, 175–201. https://doi.org/10.1016/j.obhdp.2005.07.005

Kanfer, R., & Ackerman, P. L. (1989). Motivation and cognitive abilities: An integrative aptitude treatment interaction approach to skill acquisition. *Journal of Applied Psychology*, *74*, 657–690. https://doi.org/10.1037/0021-9010.74.4.657

Kark, R., & Shamir, B. (2002). The dual effect of transformational leadership: Priming relational and collective selves and further effects on followers. In B. J. Avolio, & F. J. Yammarino (Eds.), *Transformational and charismatic leadership: The road ahead* (Vol. 2) (pp. 67–91). Amsterdam, the Netherlands: JAI Press.

Kark, R., Shamir, B., & Chen, G. (2003). The two faces of transformational leadership: Empowerment and dependency. *Journal of Applied Psychology*, *88*, 246–255.

Kerr, S., & Schriesheim, C. (1974). Consideration, initiating structure, and organizational criteria? An update of Korman's 1966 review. *Personnel Psychology*, *27*, 555–568. https://doi.org/10.1111/j.1744-6570.1974.tb01176.x

Kozlowski, S. W. J., & Bell, B. (2003). Workgroups and team in organizations. In W. C. Borman, D. R. Ilgen, & E. J. Klimoski (Eds.), *Handbook of psychology: Industrial and organizational psychology* (pp. 333–375). London: Wiley.

Kreft, I., & De Leeuw, J. (1998). *Introducing multilevel modeling*. Thousand Oaks, CA: Sage Publications.

Leavitt, K., Reynolds, S. J., Barnes, C. M., Schlipzand, P., & Hannah, S. T. (2012). Different hats, different obligations: Plural occupational identities and situated moral judgments. *Academy of Management Journal*, *55*, 1316–1333. https://doi.org/10.5465/ami.2010.1023

LePine, J. A., Erez, A., & Johnson, D. E. (2002). The nature of dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *Journal of Applied Psychology*, *87*, 52–65.

Li, G., Shang, Y., Liu, H., & Xi, Y. (2014). Differentiated transformational leadership and knowledge sharing: A cross-level investigation. *European Management Journal*, *32*, 554–563. https://doi.org/10.1016/j.emj.2013.10.004

Li, N., Chiaburu, D., Kirkman, B. L., & Xie, Z. (2013). Spotlight on the followers: An examination of the moderators relationships between transformational leadership and subordinates' citizenship and taking charge. *Personnel Psychology*, *66*, 225–260.

Li, N., Zhao, H. H., Walter, S. L., Zhang, X.-A., & Yu, J. (2015). Achieving more with less: Extra milers' behavioral influences in teams. *Journal of Applied Psychology*, *100*, 1025–1039.

Liao, H., & Chuang, A. (2007). Transforming service employees and climate: A multilevel, multisource examination of transformational leadership in building long-term service relationships. *Journal of Applied Psychology*, *92*, 1006–1019. https://doi.org/10.1037/0021-9010.92.4.1006

Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, *86*, 114–121.

Lord, R. G., Brown, D. J., & Frieberg, S. J. (1999). Understanding the dynamics of leadership: The role of follower self-concepts in the leader/follower relationship. *Organizational Behavior and Human Decision Processes*, *75*, 167–203.

Lord, R. G., & Mayer, K. J. (1993). *Leadership and information processing*. London: Routledge.

Lorinkova, N. M., Pearsall, M. J., & Sims, H. P. (2013). Examining the differential longitudinal performance of directive versus empowering leadership in teams. *Academy of Management Journal*, *56*, 573–596. https://doi.org/10.5465/amj.2011.0132

Mathieu, J., Maynard, M. T., Rapp, T., & Gilson, L. (2008). Team effectiveness 1997-2007: A review of recent advancements and a glimpse into the future. *Journal of Management*, *34*, 410–476. https://doi.org/10.1177/0149206308316061

Meertens, R. M., & Lion, R. (2008). Measuring an individual tendency to take risks: The risk propensity scale. *Journal of Applied Social Psychology*, *38*(6), 1506–1520.

Mumford, M. D., & Strange, J. M. (2002). Vision and mental models: The case of charismatic and ideological leadership. In B. J. Avolio, & F. J. Yammarino (Eds.), *Transformational and charismatic leadership: The road ahead* (pp. 109–142). Oxford, U.K: Elsevier. https://doi.org/10.1108/S1479-357120130000005013

Newman, A., Miao, Q., Hofman, P. S., & Zhu, C. J. (2016). The impact of socially responsible human resource management on employees' organizational citizenship behaviour: The mediating role of organizational identification. *International Journal of Human Resource Management*, *27*(4), 440–455. https://doi.org/10.1080/09585192.2015.1042895

Q15 ~~Ng, K. Y., & van Dyne, L. (2005). Antecedents and consequences of helping behavior in work groups. *Group & Organization Management*, *30*, 514–540.~~

Nielsen, T. M., Bachrach, D. G., Sundstrom, E., & Halfhill, T. R. (2012). Utility of OCB: Organizational citizenship behavior and group performance in a resource allocation framework. *Journal of Management*, *38*, 668–694. https://doi.org/10.1177/0149206309356326

Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA: Lexington Books.

Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2006). *Organizational citizenship behavior: Its nature, antecedents, and consequences*. Thousand Oaks, CA: Sage.

Podsakoff, P. M., Ahearne, M., & MacKenzie, S. B. (1997). Organizational citizenship behavior and the quantity and quality of work group performance. *Journal of Applied Psychology*, *82*, 262–270. https://doi.org/10.1037/0021-9010.82.2.262

Podsakoff, P. M., & MacKenzie, S. B. (1994). Organizational citizenship behaviors and sales unit effectiveness. *Journal of Marketing Research*, *31*, 351–363. https://doi.org/10.2307/3152222

Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *The Leadership Quarterly*, *1*, 107–142. https://doi.org/10.1016/1048-9843(90)90009-7

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, *63*, 539–569. https://doi.org/10.1146/annurev-psych-120710-100452

Porter, C. O. L. H. (2005). Goal orientation: Effects on backing up behavior, performance, efficacy, and commitment in teams. *Journal of Applied Psychology*, *90*, 811–818. https://doi.org/10.1037/0021-9010.90.4.811

Porter, C. O. L. H., Gogus, C. I., & Yu, R. C. F. (2011). Does backing up behavior explain the efficacy–performance relationship in teams? *Small Group Research*, *42*, 458–474. https://doi.org/10.1177/1046496410390964

Porter, C. O. L. H., Hollenbeck, J. R., Ilgen, D. R., Ellis, A. P. J., West, B. J., & Moon, H. (2003). Backing up behaviors in teams: The role of personality and legitimacy of need. *Journal of Applied Psychology*, *88*, 391–403. https://doi.org/10.1037/0021-9010.88.3.391

Preacher, K. J., Zhang, Z., & Zyphur, M. J. (2011). Alternative methods for assessing mediation in multilevel data: The advantages of multilevel SEM. *Structural Equation Modeling: A Multidisciplinary Journal*, *18*, 161–182.

Preacher, K. J., Zyphur, M. J., & Zhang, Z. (2010). A general multilevel SEM framework for assessing multilevel mediation. *Psychological Methods*, *15*, 209–233. https://doi.org/10.1037/a0020141

Rafferty, A. E., & Griffin, M. A. (2004). Dimensions of transformational leadership: Conceptual and empirical extensions. *The Leadership Quarterly*, *15*, 329–354.

Richardson, H. A., & Vandenberg, R. J. (2005). Integrating managerial perceptions and transformational leadership into a work-unit level model of employee involvement. *Journal of Organizational Behavior*, *26*, 561–589. https://doi.org/10.1002/job.329

Saavedra, R., Earley, P. C., & van Dyne, L. (1993). Complex interdependence in task-performing groups. *Journal of Applied Psychology*, *78*, 61–72.

Schriesheim, C. A., Wu, J. B., & Scandura, T. A. (2009). A meso measure? Examination of the levels of analysis of the Multifactor Leadership Questionnaire (MLQ). *The Leadership Quarterly*, *20*, 604–616. https://doi.org/10.1016/j.leaqua.2009.04.005

Shamir, B., House, R. J., & Arthur, M. B. (1993). The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science*, *4*, 577–594. https://doi.org/10.1287/orsc.4.4.577

Sparrowe, R. T., Soetjipto, B. W., & Kraimer, M. L. (2006). Do leaders' influence tactics relate to members' helping behavior? It depends on the quality of the relationship. *Academy of Management Journal*, *49*, 1194–1208. https://doi.org/10.5465/AMJ.2006.23478645

Stam, D., Lord, R. G., van Knippenberg, D., & Wisse, B. (2014). An image of who we might become: Vision communication, possible selves, and vision pursuit. *Organization Science*, *25*, 1172–1194.

Steffens, N. K., Haslam, S. A., & Reicher, S. D. (2014). Up close and personal: Evidence that a shared social identity is a basis for the 'special' relationship to binds followers to leaders. *The Leadership Quarterly*, *25*, 296–313.

Steffens, N. K., Schuh, S. C., Haslam, S. A., Pérez, A., & van Dick, R. (2015). 'Of the group' and 'for the group': How followership is shaped by leaders' prototypicality and group identification. *European Journal of Social Psychology*, *45*, 180–190.

Sutter, M., & Kocher, M. G. (2007). Trust and trustworthiness across different age groups. *Games and Economic Behavior*, *59*, 364–382. https://doi.org/10.1016/j.geb.2006.07.006

Tajfel, H. (1979). Individuals and groups in social psychology. *British Journal of Social & Clinical Psychology*, *18*, 183–190. https://doi.org/10.1111/j.2044-8260.1979.tb00324.x

Tajfel, H., & Turner, J. C. (1985). Social identity theory and intergroup behavior. In S. Worchel, & W. G. Austin (Eds.), *Psychology of intergroup relations* (2nd ed.) (pp. 7–24). Chicago: Nelson-Hall.

Tse, H. M., & Chiu, W. K. (2014). Transformational leadership and job performance: A social identity perspective. *Journal of Business Research*, *67*(1), 2827–2835. https://doi.org/10.1016/j.jbusres.2012.07.018

Tsui, A. S., Pearce, J. L., Porter, L. W., & Tripoli, A. M. (1997). Alternative approaches to the employee-organization relationship: Does investment in employees pay off? *Academy of Management Journal*, *40*, 1089–1121. https://doi.org/10.2307/256928

van Dyne, L., & LePine, J. A. (1998). Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *Academy of Management Journal*, *41*, 108–119.

van Knippenberg, D., & Sitkin, S. B. (2013). A critical assessment of charismatic–transformational leadership research: Back to the drawing board? *Academy of Management Annals*, *7*, 1–60. https://doi.org/10.1080/19416520.2013.759433

Viswesvaran, C., & Ones, D. S. (2000). Perspectives on models of job performance. *International Journal of Selection and Assessment*, *8*, 216–226.

Wang, G., Oh, I.-S., Courtright, S. H., & Colbert, A. E. (2011). Transformational leadership and performance across criteria and levels: A meta-analytic review of 25 years of research. *Group & Organization Management*, *36*, 223–270.

Wang, H., Law, K. S., Hackett, R. D., Wang, D., & Chen, Z. X. (2005). Leader-member exchange as a mediator of the relationship between transformational leadership and followers' performance and organizational citizenship behavior. *The Academy of Management Journal*, *48*, 420–432. https://doi.org/10.5465/AMJ.2005.17407908

Wang, X.-H., & Howell, J. M. (2010). Exploring the dual-level effects of transformational leadership on followers. *Journal of Applied Psychology*, *95*, 1134–1144. https://doi.org/10.1037/a0020754

Wang, X.-H., & Howell, J. M. (2012). The multilevel study of transformational leadership, identification, and follower outcomes. *Journal of Organizational Behavior*, *23*, 775–790. https://doi.org/10.1016/j.leaqua.2012.02.001

Wu, C.-H., Liu, J., Kwan, H. K., & Lee, C. (2016). Why and when workplace ostracism inhibits organizational citizenship behaviors: An organizational identification perspective. *Journal of Applied Psychology*, *101*, 362–378. https://doi.org/10.1037/ap10000063

Wu, J. B., Tsui, A. S., & Kinicki, A. J. (2010). Consequences of differentiated leadership in groups. *Academy of Management Journal*, *53*, 90–106. https://doi.org/10.5465/amj.2010.48037079

Yammarino, F. J., & Bass, B. M. (1990). Transformational leadership and multiple levels of analysis. *Human Relations; Studies Towards the Integration of the Social Sciences*, *43*, 975–995. https://doi.org/10.1177/001872679004301003

Yu, C., & Frenkel, S. J. (2013). Explaining task performance and creativity from perceived organizational support theory: Which mechanisms are more important? *Journal of Organizational Behavior*, *34*, 1165–1181.

Zaccaro, S. J., Heinen, B., & Shuffler, M. (2009). Team leadership and team effectiveness. In E. Salas, G. F. Goodwin, & C. S. Burke (Eds.), *Team effectiveness in complex organizations: Cross-disciplinary perspectives and approaches* (pp. 83–111). New York: Routledge.

Zhang, X. A., Li, N., Ullrich, J., & van Dick, R. (2015). Getting everyone on board: The effect of differentiated transformational leadership by CEOs on top management team effectiveness and leader-rated firm performance. *Journal of Management*, *41*, 1898–1933. https://doi.org/10.1177/0149206312471387

Zhu, Y., & Akhtar, S. (2014). How transformational leadership influences follower helping behavior: The role of trust and prosocial motivation. *Journal of Organizational Behavior*, *35*, 373–392. https://doi.org/10.1002/job.1884

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How to cite this article: Lorinkova NM, Perry SJ. The importance of group-focused transformational leadership and felt obligation for helping and group performance. *J Organ Behav*. 2018;1–17. https://doi.org/10.1002/job.2322

APPENDIX A

A.1 | Validation tests for group- and individual-focused transformational leadership scales

To validate the specific group- and individual-focused transformational leadership dimensions we chose, we conducted a supplementary validation study. In this study, we assessed the same dimensions from the established Podsakoff et al. (1990) transformational leadership scale as included in our primary study (e.g., individualized support and intellectual stimulation for individual-focused leadership and articulating a vision, gaining acceptance of group goals, and teambuilding for group-focused leadership) and the full X.-H. Wang and Howell (2010) dual-focused transformational leadership scale. Our aim with this supplementary study was to show that the measurement model for group- and individual-focused leadership was similar as in our study and to show that the dimensions we used for our study were highly correlated with the full group- and individual-focused leadership subscales from Wang and Howell's dual-focused transformational leadership measure.

A.2 | Sample

We collected data from 368 undergraduate business students in a participant pool at a medium-sized Mid-Atlantic University. Students in this participant pool complete various research studies for course credit throughout the year. Our particular online survey asked students to report leadership behaviors of their direct supervisor in their current or most recent job (within the past year). They were allowed to report on jobs that were either paid or unpaid, including structured volunteer roles in which they reported to a specific supervisor. Student athletes who could not hold other jobs (due to demanding schedules associated with playing a college sport) were allowed to report on the dynamics with their coach as a leader. If students had no work experience of any of these types, they were not eligible to participate in this survey. Unlike our primary study, we did not have respondents who were grouped into teams, so all statistics were calculated using individual-level data only.

Of the final 368 students in the sample, 73% reported on a paid job (average pay $15.40/hr; range $6–$41), 12% on an unpaid internship or volunteer position, and 12% were athletes reporting on their coach's leadership behaviors; 68% of these reported on a role that was somewhat or directly related to their future career goals. Average time worked was 25.7 hr weekly (range 3–65), average tenure with the leader was 6.6 months (range 0–62 months), and average age was 19.8 years, and 55% were male.

A.3 | Measures

In order to assess the validity of our measures, we included measures for the full X.-H. Wang and Howell (2010) and Podsakoff et al. (1990)

transformational leadership scales in addition to our specific items from our primary study. We also included the full Eisenberger et al. (2001) obligation scale and Podsakoff et al. (1997) helping scale in conjunction with the measures of these constructs from our primary study. See Figure A1 for a full list of the items we used in our primary study and again in this validation study (which we refer to as "current study" in all the tables). All measures used a 5-point response scale (5 = *strongly agree*).

GFL:

- Our supervisor fosters collaboration among his/her subordinates
- Our supervisor encourages employees to be "team players"
- Our supervisor develops a team attitude and spirit among his subordinates

(team-building)

- Our supervisor inspires us with his/her plans for the future
- Our supervisor provides us with a compelling vision to work toward
- Our supervisor has a clear understanding of where we are going

(articulating a group vision)

- Our supervisor gets the group to work together for the same goal
- Our supervisor is able to get others to commit to what we need to accomplish in our unit

(fostering acceptance of group goals)

IFL:

- My supervisor shows respect for personal feelings
- My supervisor behaves in a manner, which is thoughtful of my personal needs.
- My supervisor sees that my interests are given due consideration.

(individualized support)

- My supervisor challenges me to think about old problems in new ways.
- My supervisor stimulates me to rethink some things that I have never questioned before.
- My supervisor challenges me to re-examine some of my basic assumptions about work.

(intellectual stimulation)

Obligation:

- I have an obligation to do whatever I can to help my work crew to achieve its goals.
- I feel personally responsible for the success/failure of the project
- I feel a sense of obligation to participate in all aspects of the project
- I have an obligation to my work crew to ensure that I produce high-quality work on this project.

Helping:

- I help my colleagues if someone falls behind in his work
- I go out of my way to help my colleagues with work-related problems
- I take on extra responsibilities in order to help my colleagues who have heavy work loads

Task Interdependence:

- I cannot accomplish my tasks without information or materials from other members of my work group
- My colleagues depend on me for information or materials needed to perform their tasks

FIGURE A1 Items from the current study

TABLE A1 Comparison of leadership scales measurement models

Model	Factor	χ^2	*df*	$\Delta\chi^2$	RMSEA	SRMR	CFI	TLI
Dong et al. (2017)	Two-factor model	15.88	8		0.05	0.03	0.99	0.98
	One-factor model	210.44	9	104.76**	0.18	0.08	0.90	0.84
X.-H. Wang and Howell (2010)	Two-factor model	31.26	8		0.09	0.25	0.98	0.97
	One-factor model	136.70	9	105.44**	0.20	0.05	0.92	0.87
Current study	Two-factor model	22.07	4	1.14	0.08	0.02	0.99	0.96
	One-factor model	23.21	5	1.14	0.10	0.03	0.97	0.95

Note. $N = 368$.

**$p < 0.01$.

TABLE A2 Descriptive statistics of group-focused leadership measures

Variable	*M*	*SD*	1	2
1. GFL (Dong et al., 2017)	3.81	0.88		
2. GFL (current study)	3.89	0.89	0.95**	
3. GFL (X.-H. Wang & Howell, 2010)	3.90	0.82	0.87**	0.90**

Note. $N = 368$. ~~Shaded areas highlight correlations of similar scales (i.e., IFL or GFL).~~ GFL: group-focused leadership; ~~IFL: individual-focused leadership.~~

**$p < 0.01$.

TABLE A3 Descriptive statistics of individual-focused leadership measures

Variable	*M*	*SD*	1	2
1. IFL (Dong et al., 2017)	3.80	0.70		
2. IFL (current study)	4.01	0.91	0.88**	
3. IFL (X.-H. Wang & Howell, 2010)	3.93	0.82	0.78**	0.83**

Note. $N = 368$. ~~Shaded areas highlight correlations of similar scales (i.e., IFL or GFL).~~ IFL: individual-focused leadership~~; GFL: group-focused leadership~~.

**$p < 0.01$.

TABLE A4 Descriptive statistics of nonleadership measures

Variable	*M*	*SD*	1	2	3	4
1. Felt obligation (Eisenberger et al., 2001)	3.96	0.71				
2. Felt obligation (current study)	4.03	0.67	0.80**			
3. Helping (Podsakoff et al., 1997)	3.81	0.56	0.61**	0.60**		
4. Helping (current study)	3.81	0.71	0.57**	0.55**	0.78**	
5. Task interdependence	3.53	1.05	0.44**	0.30**	0.32**	0.32**

Note. $N = 355$. ~~Shaded areas highlight correlations of similar scales.~~

**$p < 0.01$.

A.4 | Results

First, because all constructs were self-report at the same time point in this validation study, we acknowledge CMV may be a concern. Thus, we followed the same procedures as in the primary study to assess CMV. Namely, we used individual risk propensity (risk propensity scale: Meertens & Lion, 2008) as a self-assessed "marker variable" (Lindell & Whitney, 2001) and estimated the correlations between this variable and the indicators of the variables of interest to our study. None of the correlations (ranging between −0.10 and 0.03) was significant, which, we concluded, added additional strength to the results of our validation study.

Next, we conducted a CFA comparing a one-factor model to a two-factor model for our measures and the full X.-H. Wang and Howell (2010) and Podsakoff et al. (1990) measures (see Table A1). Confirming our conceptualization of these constructs, the two-factor model exhibited a better fit to the data for all three measures. Next, we calculated the correlations of the leadership scales we used with the full X.-H. Wang and Howell and Podsakoff et al. measures (see Tables A2 and A3). As shown there in the shaded sections, measures were comparable and highly correlated, suggesting that our measures showed an acceptable level of validity.

Finally, we calculated correlations of the other study variables we used, comparing our scales with the full previously published scales (see Table A4). Again, the shaded cells show high correlations, which we interpret to mean favorable overlap between those full published measures and our shortened measures.

In sum, this validation study provides evidence of the validity of our measures compared with previously published measures, lending to more credibility of the results of our primary study and most importantly, our operationalization of group- and individual-focused transformational leadership.