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RELATIVE LEADER–MEMBER EXCHANGE WITHIN TEAM CONTEXTS: HOW AND WHEN SOCIAL COMPARISON IMPACTS INDIVIDUAL EFFECTIVENESS

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A multilevel model was developed to examine how and when a focal individual's leader–member exchange (LMX) relative to the LMXs of coworkers within the team (relative LMX, or RLMX) influences individual in-role performance, organizational citizenship behavior (OCB), and job satisfaction. Results, based on a sample of 275 leader–member dyads within 35 teams of a beverage company, largely supported the hypotheses. Specifically, using multilevel polynomial regression analyses, the results showed that self-efficacy partially mediated the relationship between RLMX and in-role performance and job satisfaction, and fully mediated the relationship between RLMX and OCB. Furthermore, the results demonstrated that team identification attenuated RLMX's direct effect on self-efficacy, and indirect effects on in-role performance and OCB and team supportive behavior attenuated RLMX's direct effect on self-efficacy and indirect effect on in-role performance.

The study of leader–member exchange (LMX) has proven to be a rich leadership approach over the past several decades (Anand, Hu, Liden, & Vidyarthi, 2011; Graen & Uhl-Bien, 1995). A voluminous body of research has demonstrated that the higher the quality of the LMX relationship, the more employees feel an obligation to reciprocate by providing excellent performance and positive attitudes (see meta-analytic reviews by Dulebohn, Bommer, Liden, Brouer, & Ferris, in press; Gerstner & Day, 1997; Ilies, Nahrgang, & Morgeson, 2007). Despite these robust findings, prior research has primarily focused on the impact of LMX on individual employees at the dyad level, largely ignoring the fact that LMX is embedded within the wider social context of teams. This omission is unfortunate in that most organizations use teams to structure work (Cohen & Bailey,

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1997), and the LMX relationship cannot be fully understood in isolation from the team contexts that shape it (Uhl-Bien, Maslyn, & Ospina, 2012). Indeed, this deficiency prompted researchers (Anand et al., 2011; Erdogan & Liden, 2002; Yammarino, Dionne, Chun, & Dansereau, 2005) to call for more research on LMX within the context of teams.

We answered this call by considering LMX within the team context by exploring an extension of the LMX concept, relative leader–member exchange (RLMX), which refers to the actual level of one's own LMX quality as compared with the average LMX within the team (i.e., team LMX or TLMX; Henderson, Wayne, Shore, Bommer, & Tetrick, 2008). Due to the nature of interdependence in a work team (Wageman, 2001), an individual's LMX is not isolated from other members' LMXs, and through a series of daily interactions, informal conversations, and shared events, individuals may observe, learn, and compare their own LMX relationships with their teammates' LMX relationships. As Hogg et al. (2005) noted, LMX relationships within the team exist not only in "absolute" terms but also in "relative" terms. For instance, within a team where most members have a low LMX relationship, a team member in an LMX relationship of moderate quality may be able to receive more benefits and form higher self-evaluations relative to others. Conversely, the relative standing for an individual in a moderate-quality LMX relationship in a team with a high average LMX would not be as favorable. Two pioneering studies on RLMX have demonstrated that individuals' RLMX standings have a positive impact on their in-role and extra-role performance (organizational citizenship behavior, OCB) beyond the effects of LMX alone (Henderson et al., 2008; Vidyarthi, Liden, Anand, Erdogan, & Ghosh, 2010). However, the knowledge of *how* and *when* the impact of RLMX occurs is still far from complete. Specifically, little is known about the underlying psychological mechanisms through which the impact of RLMX on individuals is realized. Thus, we attempted to explore the mechanisms by considering individuals' self-efficacy (i.e., confidence about one's capabilities to accomplish tasks; Bandura, 1986) as a psychological process that explains the effects of RLMX on individual outcomes. Our contention is guided by social comparison theory (Festinger, 1954), which notes that people tend to utilize social comparison information to form self-evaluations on their capabilities and to direct their job attitudes and behaviors (Wood, 1989). Thus, we contend that RLMX standing serves to shape individuals' self-efficacy, which, in turn, positively relates to individual effectiveness as manifested by in-role performance, OCB, and job satisfaction.

Another part of our incomplete knowledge of RLMX concerns the way in which the contexts in which leader–follower relationships are embedded influence the outcomes associated with RLMX. Known as the "hedonic consequences of social comparison" (Lyubomirsky & Ross,

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1997, p. 1141), high RLMX members who compare themselves with their worse-off teammates are likely to form a positive self-image whereas low RLMX members tend to develop an unfavorable self-evaluation after comparing with better-off others. However, it remains largely unknown whether this "hedonic" effect holds for all contexts within teams. This is a critical gap in that neglecting the role of team contextual factors on the social comparison processes is likely to result in a biased understanding of the impact of RLMX on individual members. Indeed, the assimilation-contrast model of social comparison (Mussweiler, Rüter, & Epstude, 2004) suggests that effects for social comparisons may be diminished when the focal employee considers comparison targets as similar to one's self. In line with this theoretical perspective, two team contextual factors (i.e., team identification and team supportive behaviors) are identified as influencing the extent to which individuals perceive average others as being similar to themselves, thus weakening the relationship between RLMX and individual outcomes. Specifically, when individuals strongly identify with their teams, they perceive a high level of similarity between themselves and their teams (Turner & Haslam, 2001). Similarly, when individuals receive instrumental help from their teams, they are likely to be motivated to work with their teammates toward the common goals (Carson, Tesluk, & Marrone, 2007), which helps to establish similarity perceptions. In a cooperative work environment in which members support one another and identify with the team, their relative standing with the leader becomes less salient than in less cooperative teams in which members must rely more on the leader for support (Buunk, Zurriaga, Peíró, Nauta, & Gosalvez, 2005). Thus, we propose that the outcomes of individual members with high team identification and those within teams providing more supportive behaviors are based less on RLMX than for individuals having lower team identification and receiving less support from teammates.

Using social comparison theory as an overarching theory, we attempt to answer the question of *how* and *when* RLMX influences individual effectiveness within teams. It is important to note that here the focus is on traditional teams, where individual members work interdependently on tasks with their coworkers in striving to meet common goals (Hackman, 2002). Traditional teams—rather than short-term teams that disband relatively quickly or virtual teams that involve less interaction between leaders and members—are better contexts for exploring how individuals observe and compare with others' LMX relationships (Goodman & Haisley, 2007). Figure 1 depicts our model. Taken together, this study makes three contributions. First, as Greenberg, Ashton-James, and Ashkanasy (2007) noted, social comparison provides a valuable perspective to better understand the fundamental interpersonal processes rooted

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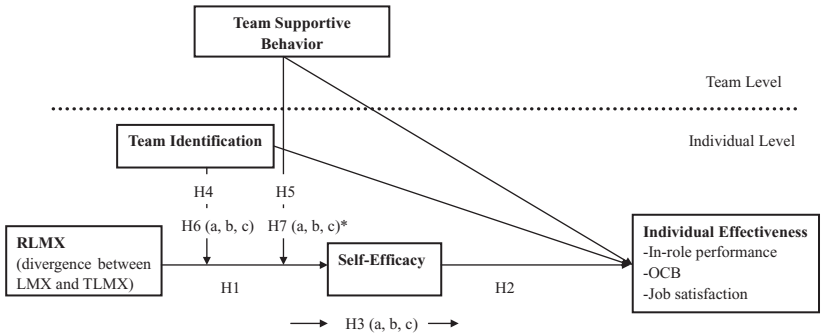

Figure 1: **Proposed Model.**

Note. *H6 and H7 propose moderated mediation effects.

in LMX relationships. This study explains *how* the social comparison of LMX impacts individual effectiveness by considering self-efficacy as a mediator. Second, this study is one of the first to examine *when* RLMX has positive value for individuals by considering the important yet ignored team contexts (i.e., team identification and team supportive behavior). Third, social comparison research has received criticisms for lacking explanation of phenomena in organizations (Greenberg et al., 2007). So, this investigation on RLMX within work teams addresses this omission.

Theory and Hypotheses

RLMX and Social Comparison

A key assumption of LMX theory lies in the concept of differentiation (Liden & Graen, 1980); that is, leaders tend to differentiate their treatment of followers in the same team. Empirical research has shown that differentiated LMX relationships exist within the team context (Dansereau, Graen, & Haga, 1975; Erdogan & Bauer, 2010; Liden, Erdogan, Wayne, & Sparrowe, 2006; Liden & Graen, 1980), which implies that LMX is interpreted relative to the LMX relationships of other team members (Vidyarthi et al., 2010). The construct of RLMX is rooted within social comparison theory (Goodman, 1977; Greenberg et al., 2007; Wood, 1996), which suggests that social comparison is closely tied with individual employees' attitudes and behaviors in the organization. Social comparison theory contends that people inevitably compare with others at the workplace, especially within their work teams. Within the team context, exposed to the same leader, events, practices, and experience on a daily basis, most individual team members naturally desire to compare with their teammates to

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form self-evaluations (Forsyth, 2000; Schwalbe, Gecas, & Baxter, 1986). According to social comparison theory, people are fundamentally concerned with the way they compare to similar others in the workplace, such as teammates, in order to better understand: (a) their own capabilities and skills (Festinger, 1954); (b) the possibility of performing tasks well (Goethals & Darley, 1977; Goodman, 1977); and (c) whether they are accepted and respected by the team (Darley, 2004; Goethals & Darley, 1986). RLMX is a salient reference point that triggers these three motives that drive individuals to care about the way they compare with others within their teams. First, RLMX helps individual members to accurately assess their capabilities and skills. Social comparison literature suggests that individuals evaluate their capabilities by considering others' opinions and perceptions of their capabilities (Darley, 2004). Within work teams, leaders tend to develop high-quality relationships with individual members who are perceived as being capable and as possessing potential to perform well (Liden, Wayne, & Stilwell, 1993). It follows that RLMX standing sends individual members signals concerning the way they compare with the rest of the team and whether their capabilities are recognized and confirmed by the leader. Second, RLMX provides individual members information pertaining to the likelihood that they can perform well. It has been consistently documented that job performance is enhanced by the assistance and support from the leader (Dulebohn et al., in press; Gerstner & Day, 1997). Because resources and time are limited, leaders allocate them disproportionately to the high RLMX members. Armed with more leader support, such as delegation of decision influence (Scandura, Graen, & Novak, 1986), information, attention (Graen & Scandura, 1987), and special task assignments to the subordinates (Liden & Graen, 1980), high RLMX members come to know that it is more likely for them to perform well than low RLMX members. This is consistent with Suls, Martin, and Wheeler's (2002) statement that individuals tend to base their comparisons with other team members on the resources they gain from the leader. Third, RLMX sends signals to individual members about the extent to which they are respected and accepted by the team. This is because high RLMX standings imply that individual members gain the leader's trust. Team members who are trusted by the leader tend to be more trusted by fellow teammates as well (Lau & Liden, 2008; Sherony & Green, 2002), which provides additional information to members concerning their status with the leader, relative to their teammates.

Although team members likely have closer relationships with some teammates than others, social comparisons based on RLMX cut across all members in traditional teams characterized by interdependence and face-to-face interactions. Theoretical support for this assertion can be demonstrated in three ways. First, according to Goodman and Haisley's

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(2007) theoretical model of social comparison, the choice of the referent is dependent on whether the information of the targets is available. Even though teams may differ in terms of the types of interdependence (Campion, Medsker, & Higgs, 1993; Wageman, 1995), it is generally agreed that teams are by definition groups that exhibit task interdependence (Guzzo & Dickson, 1996; Kozlowski & Bell, 2003; Mathieu, Maynard, Rapp, & Gilson, 2008). Thus, it is necessary for each team member to engage in frequent interactions with other team members, which provide team members with ample information about each teammate as well as the nature of each members' work (Shea & Guzzo, 1987; Wageman, 2001). Because work teams are intact social units (Hackman, 2002), the interdependent tasks and shared information are available to all team members. This is not to say that individual members all have the same skills, roles, and expertise, but it is expected that due to the interactions, communications, and coordination among all members within the team, individual members are likely to have information of every teammate to generate an overall image of the quality of the average others' LMX relationships. Second, because of our focus on traditional teams, even though a portion of the within-team interactions and coordination can occur virtually, most communication occurs face-to-face because team members share common spaces and work interdependently (Hollenbeck, Beersma, & Schouten, 2012). Compared with other communication channels, such as videoconferences, phone calls, or emails, which are frequently utilized in virtual teams or cross-functional teams (Cohen & Bailey, 1997; Hollenbeck et al., 2012), face-to-face interactions are considered the richest medium in that they convey more nonverbal information and allow immediate feedback (Daft & Lengel, 1986). This makes team members work more proximately with each other and have more opportunities to observe and assess others' relationships with the leader (Brickman & Bulman, 1977; Goodman & Haisley, 2007). Third and more important, the choice of the average across LMX relationships on the team as the comparison referent is based on the nature of the RLMX concept, which is concerned with individual members' relative standing within the team in terms of their LMX relationships. Comparing with only one or a small portion of the team members is unlikely to provide such information for individual members. It is commonly suggested in the social psychology literature that people tend to choose the "average" or the whole team as the referent point and evaluate whether they are better than or worse than average (Blanton, Buunk, Gibbons, & Kuyper, 1999; Forsyth, 2000; Gilbert, Giesler, & Morris, 1995; Moore, 2007; Singer, 1981; Wood, Taylor, & Lichtman, 1985). Applying this referent to the team context, high RLMX standing occurs when individual members possess a better-than-average quality of LMX relationships within the team, whereas low RLMX appears

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when individuals hold a worse-than-average LMX relationship within the team.

RLMX, or the actual difference between one's LMX and the average teammates' LMX, serves as the objective social comparison information that may directly influence individual members' perceptions of their relative standings. This can be explained by a key assumption in social comparison theory, which suggests that it is people's natural inclination to actively seek objective social comparison information in the environment to help them form comparative ratings (Wood, 1996). The social comparison information can be perceived by individual members through direct or socially mediated experience (Bandura, 1986). Direct experience may include the focal employee's observations of the interactions and communications between the leader and other team members during team meetings, common events, or other daily work. Socially mediated experience may be developed in many ways, such as informal social conversations or through the grapevine. Through the information gleaned from these interactions with others, individual members are able to gauge the differences between their own LMX and the average of others' LMX relationships, and make judgments about their relative standings in the team.

In addition to its influence on individuals' conscious evaluation process, the objective inputs to social comparison (i.e., RLMX) may also be presented through a subliminal mechanism and may subsequently impact individuals' self-evaluation (Klein, 1997; Wood, 1996). That is, RLMX can be perceived without awareness (Brickman & Bulman, 1977; Goethals, 1986). This may be manifested through individuals' observations of the nonverbal behaviors between other teammates and the leader (Vidyarthi et al., 2010). For example, seeing other teammates laughing and happily talking with the leader may send subliminal signals of the quality of others' relationships with the leader and implicitly affect the focal employee's evaluation of the self. This unconscious comparison process has gained empirical support in the social psychology literature (Gilbert et al., 1995; Mussweiler et al., 2004; Stapel & Blanton, 2004). Thus, the actual LMX standing (RLMX) drives individuals to consciously or unconsciously engage in making social comparisons and subsequently impacts their self-evaluations. Supporting this argument is the recent evidence that RLMX positively affected individuals' LMX social comparison (i.e., individuals' subjective ratings of their relative LMX standing; Vidyarthi et al., 2010).

RLMX and Self-Efficacy

The social comparison information provided by RLMX standing can be obtained by individuals either consciously or unconsciously

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(Greenberg et al., 2007; Klein, 1997; Morse & Gergen, 1970; Stapel & Blanton, 2004; Wood, 1996) and influences individuals' self-evaluations, including self-efficacy. Self-efficacy, defined as "people's judgment of their own capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1986, p. 391), is a key form of cognitive evaluation that guides individual behaviors. Within work teams, the social comparison process inherent in RLMX ratings provides an important source for forming self-efficacy beliefs (Greenberg et al., 2007). Drawing on social comparison theory, individuals are likely to socially compare with others who are thought to be better off (i.e., upward comparison; Festinger, 1954) or compare with others who are worse off (i.e., downward comparison; Hakmiller, 1966). Research has demonstrated that, although greatly complicated by contextual factors, generally, people who engage in downward comparisons experience more positive feelings (Lyubomirsky & Ross, 1997) and are more confident about themselves (Hakmiller, 1966). Conversely, people who make upward comparisons discover that they are of lower standing relative to others, which reduces their positive self-image and decreases self-efficacy (Maslach, 1993). Extending the theory to RLMX, members with high RLMX relationships stand at the upper level within the team in terms of their LMX relationships and are likely to make downward comparisons. These high RLMX members tend to feel good about being better than the rest of the team and enjoy the advantages of gaining more attention and support from the leader, thereby generating high self-efficacy. Individual members with low RLMX standings, on the other hand, lie at the bottom of the team in terms of their LMX rankings and are relegated to making upward comparisons. Low RLMX members may find themselves receiving less attention from the leader compared to others in the team, which increases self-doubt concerning their own capabilities and reduces their sense of personal accomplishment. This is in line with the social comparison element in the social cognition process (Bandura, 1986), which states that the formation of self-efficacy does not occur in isolation but by evaluating one's capability through comparisons with others (Klein, 1997), especially others' vicarious behaviors (e.g., observing how others are doing). RLMX provides the context for conducting such evaluation and comparison. High RLMX standing signals leaders' particular interest and trust in target members, which serves as a form of social persuasion and helps to confirm individual members' capabilities (Bandura, 1986). Providing indirect support for the above line of reasoning, Liao, Liu, and Loi (2010) found that the social comparison element in LMX relationships (LMX differentiation) attenuated LMX's direct relationship with self-efficacy and indirect relationship with creativity.

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Hypothesis 1: RLMX is positively related to self-efficacy.

Self-Efficacy and Individual Effectiveness

The self-efficacy beliefs resulting from individuals' RLMX are expected to relate to individual behavioral outcomes, such as in-role performance and OCB, and attitudinal outcomes such as job satisfaction. When individual members perceive themselves to be competent, they engage in self-regulation processes to act in a manner consistent with their self-evaluation, such as exerting more effort at work and persevering in the face of obstacles and difficulties (Bandura, 1986). As a result, they perform well in reality (Eden, 2003). Research has consistently shown that self-efficacy is positively related to in-role performance (see Stajkovic & Luthans, 1998, for a meta-analytic review). Second, in addition to in-role performance, contextual performance, such as OCB, describes behaviors that are not required in the job description but in aggregate promote collective functioning (Organ, 1988). Research suggests that OCB is critical for team effectiveness (Ehrhart & Naumann, 2004; Morgeson, Reider, & Campion, 2005). Individuals who have confidence in their own capabilities are likely to engage in job activities that extend beyond formal job requirements in the form of OCBs (McAllister, Kamdar, Morrison, & Turban, 2007; Smith, Organ, & Near, 1983). High self-efficacy levels encourage individuals to believe that they are able to help others and thus encourage more OCBs at work. Third, individuals with high self-efficacy tend to be more optimistic about their future success (Bandura, 1986), which generates positive feelings and increases job satisfaction (Judge, Locke, & Durham, 1997). Meta-analytic evidence has demonstrated that self-efficacy is positively correlated with job satisfaction (Judge & Bono, 2001).

Hypothesis 2: Self-efficacy is positively related to (a) in-role performance, (b) OCB, and (c) job satisfaction.

The Mediating Role of Self-Efficacy

Based on the above reasoning, social comparison processes triggered by RLMX influence self-efficacy levels, which in turn affect work behaviors and attitudes. RLMX enhances self-efficacy by offering information that enables members to better understand (a) their capabilities and skills, (b) the likelihood that they can perform well, and (c) the extent to which they are accepted by the team. The presence of these three motives in turn helps members to develop confidence in their abilities, which is manifested in their achievement of high-level performance outcomes (Goethals & Darley, 1977). Thus, integrating our rationale for Hypotheses

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1 and 2 with findings demonstrating the positive impact of RLMX on performance outcomes (Henderson et al., 2008; Vidyarthi et al., 2010), we expect self-efficacy to play a mediating role in the relationships between RLMX and in-role performance, OCB, and job satisfaction. Specifically, RLMX serves as salient social comparison information that facilitates individual members to engage in the process of comparatively judging their own capabilities. This, in turn, helps to form their self-efficacy beliefs. These self-efficacy perceptions then directly affect individual members' efforts in pursuing high levels of in-role performance, their inclination and capabilities to engage in OCBs, and their overall satisfaction with the job.

Hypothesis 3: Self-efficacy mediates the relationships between RLMX and (a) in-role performance, (b) OCB, and (c) job satisfaction.

The Moderating Role of Team Identification and Team Supportive Behavior

The above reasoning suggests that RLMX is positively related to individual members' self-efficacy and behavioral and attitudinal outcomes. However, the strength of the relationship between RLMX and self-efficacy may be influenced by contextual factors. A closer examination of social comparison theory reveals that the effects of social comparison are contingent on "the extent to which individuals see themselves as similar to or different from the comparison target – i.e. assimilation vs. contrast" (Buunk & Gibbons, 2007, p. 11). Assimilation effects occur when the perceiver focuses on the commonality between the self and the comparison targets and expects to be similar to the targets in the future. Contrast effects arise when the perceiver emphasizes the differences with the comparison targets and does not expect to become similar to the targets in the future (Buunk & Gibbons, 2007; Mussweiler et al., 2004; Sherif & Hovland, 1961). Assimilation and contrast effects may occur with upward and downward comparisons (Buunk, Collins, Taylor, Van Yperen, & Dakoff, 1990). In general, assimilation with upward targets and contrast with downward targets boosts self-assessments and arms individuals with the motivation to make self-improvements (Wood, 1989). Conversely, contrast with upward targets and assimilation with downward targets decreases individuals' sense of personal mastery and lowers their self-efficacy beliefs (Buunk & Gibbons, 2007).

Consistent with this theoretical perspective, LMX standing within the team (RLMX) may dictate whether individuals make upward or downward social comparisons. The effects of both upward and downward comparisons are dependent on whether the focal employee views the comparison targets (i.e., their average teammates) as similar to or in contrast with the

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self. Based on team literature, two central team contextual factors that contribute to determine the assimilation–contrast effect of social comparison are team identification and team supportive behavior.

Team identification, defined as one's perception of unity with the team (Ashforth & Mael, 1989), depicts the emotional bonding between an individual member and his or her team. Based on Buunk et al.'s (1990) assimilation–contrast effects of social comparison and more precisely Buunk and Ybema's (1997) identification–contrast model, team identification influences the way individual members respond to RLMX. Specifically, individual members with high team identification are likely to categorize themselves as part of the team and experience a sense of oneness with the team (Ashforth & Mael, 1989; Turner, 1991). Thus, team identification makes individual members feel similar and relationally close to their teammates (Brewer, 1979; Kramer, Brewer, & Hanna, 1996). That is, individual members see their team members as sharing a common fate with them (Kramer & Goldman, 1995). Under this circumstance, high RLMX members who make downward comparisons in the team may engender negative feelings and lowered self-evaluation because when they strongly identify with the team, they see themselves as similar to their worse-off teammates and share the fate of these teammates (Lockwood, 2002; Taylor & Lobel, 1989; Tesser, 1988), which in turn weakens their sense of relative superiority. Based on Buunk and Ybema (1997), identification with lower status teammates may lower self-esteem. It follows that the advantages for high RLMX members in the social comparison process are reduced, such that high RLMX status may no longer serve as a motivational basis for them to perform better. Low RLMX members, on the other hand, make upward comparisons and feel more hopeful, inspired, and confident because when they identify themselves with the better-off teammates, they tend to recognize ways in which they are similar to these teammates and perceive the status level of these teammates' (i.e., high RLMX standings) as attainable for themselves in the future (Buunk & Ybema, 1997). Their self-evaluation is likely to be boosted (Brown, Novick, Lord, & Richards, 1992; Lockwood & Kunda, 1997). Taken together, our arguments concerning low and high RLMX members combine to indicate that, under the high team identification condition, the relationship between RLMX and individual self-efficacy becomes weaker relative to contexts in which team identification is low.

In contexts where team identification is low, team members are prone to feel detached from the team, causing them to contrast themselves from others in the team (Dutton, Dukerich, & Harquail, 1994; Mael & Ashforth, 1992). In the absence of team identification, relative status with the leader becomes more salient. In this scenario, high RLMX members tend to focus on the differences between themselves and their low RLMX

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teammates, and see their superior standings as unique and unattainable by their teammates, which serves to build self-confidence about their performance (Buunk et al., 1990). At the same time, low RLMX members may feel more ego deflated, frustrated, and doubtful of their abilities (Collins, 1996) because they do not envision any positive change in the relationship with their leader in the future and do not have sense of control of improving their status (Aspinwall, 1997; Lockwood & Kunda, 1997). Thus, when individual members do not identify with their teams, RLMX plays a critical role in shaping their self-efficacy beliefs. Taken together, low identification generates contrast effects, where contrast with upward targets (i.e., when low RLMX members compare themselves against their high RLMX teammates) lowers self-evaluation and contrast with downward targets (i.e., when high RLMX members compare themselves to their low RLMX teammates) enhances their self-efficacy beliefs. Therefore, under low team identification conditions, the positive role of RLMX on self-efficacy is stronger than it is under high team identification conditions.

Hypothesis 4: Team identification moderates the relationship between RLMX and self-efficacy such that the relationship is less positive when team identification is high than when team identification is low.

Just as the assimilation–contrast model of social comparison (Buunk et al., 1990) implies that people may respond to RLMX in different ways, depending on team identity, assimilation and contrast effects may also be influenced by team supportive behavior. Although team identification shapes the way individual members respond to RLMX through a relational lens, team supportive behavior introduces an instrumental perspective because it provides resources for individual members to improve their capabilities and facilitates understanding among team members, thereby affecting how individual members react to their comparison with team members in terms of RLMX.

Team supportive behavior refers to teammates' behaviors that provide task assistance, positive recognition, and effective cooperation (Aubé & Rousseau, 2005). Different from individual-level constructs that describe the quality of relationship between an individual member and team members (e.g., team–member exchange; Seers, 1989), team supportive behavior is a team-level phenomenon that describes a general supportive and cooperative climate within the team. This team-level supportive climate has the potential to impact all team members, whether high or low in RLMX. A strong team supportive climate induces assimilative responses to the social comparison information (e.g., RLMX), in that with mutual help and resource sharing, individual members are likely to perceive themselves as being more similar to one another in striving to meet team goals

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and, as a result, are more directly influenced by other teammates' behaviors than occurs when the team supportive climate is weak or nonexistent (Buunk & Ybema, 1997; Tesser, 1988). That is, team supportive behavior ties individual members together and motivates them to work toward the same collective goals; and this similarity, in turn, affects their feelings and self-evaluations when responding to social comparison information. For example, individual members are likely to feel more confident and proud when watching other teammates doing well as they all strive toward the common goals, and are also likely to feel frustrated and concerned when watching others who are not succeeding (Buunk et al., 2005). Thus, by shaping individual members' perceptions of similarity, team supportive behavior serves to reduce the strength of the positive influence of RLMX on self-efficacy.

Supportive team climates enable individual members to gather instrumental information and resources to assist their work, as well as obtain help from each other if they fall behind in their work. As a result, the commonality among team members is highlighted and the assimilation effect of social comparison emerges. Further, team supportive behavior encourages more intrateam cooperation (Aubé & Rousseau, 2005) and advances the mutual understanding of each other's work and team goals. As such, this cooperative work environment enables all individual members to expect a similar future (Lam, Van der Vegt, Walter, & Huang, 2011). In such a context, low RLMX members who are more inclined to make upward comparisons feel more positive and hopeful about their future, which in turn enhances their confidence and enthusiasm about their work. However, supportive contexts also lead high RLMX members, who make downward comparisons, to feel less privileged given that *all* team members are receiving support from the team. Consequently, their self-efficacy is not as high as it is under conditions of low team support. Providing support for the above argument, Buunk et al. (2005) found that in climates characterized by cooperation and support, individuals who made downward comparisons had more negative evaluations and those who made upward comparisons viewed things more positively.

When there is a team climate for little support among members, team members are aloof to each other when help is needed, which increases the psychological distance and differences among team members (Brown et al., 1992). In addition, the lack of cooperation makes team members less familiar with each other's work and insensitive to the similarities with others, triggering contrast effects of social comparison. These contrast effects, in turn, make RLMX more salient in shaping individual self-efficacy. Specifically, the downward contrast effect helps high RLMX individuals to enjoy the unique advantages of the special resources they obtained from their leaders without being worried about the possibility of

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declining toward a similarly low standing as their low RLMX teammates. This, in turn, motivates them to exert more cognitive effort in order to maintain their benefits (Martin, Seta, & Crelia, 1990), thus promoting sustained high self-efficacy. At the same time, the consequences of low RLMX combined with the lack of team support (i.e., upward contrast effect) can be debilitating because low RLMX members tend to focus on the differences between themselves and their high RLMX teammates and see little hope of achieving high RLMX status in the future. This results in low self-efficacy beliefs.

Hypothesis 5: Team supportive behavior moderates the relationship between RLMX and self-efficacy, such that the relationship is less positive when team supportive behavior is high than when team supportive behavior is low.

On the basis of the assimilation and contrast model of social comparison (Buunk et al., 1990) and rationale provided for Hypotheses 3, 4, and 5, we expect that individual members' self-efficacy beliefs resulting from the interactions between RLMX and team contextual factors (i.e., team identification and team supportive behavior) contribute to individual effectiveness. Specifically, when team identification is high and team supportive behavior is high, individual members tend to feel psychologically close to their teammates (Brown et al., 1992), see the status of others as tied to their own future (Buunk & Ybema, 1997), and hence, the assimilation effect dominates their responses to RLMX. That is, low RLMX members feel hopeful and more confident about themselves (i.e., downward assimilation) and are motivated to enhance their current standings by working toward better performance (Lockwood & Kunda, 1997; Taylor & Lobel, 1989; Wood, 1989), providing more OCBs (Tyler & Blader, 2000), and being more satisfied. High RLMX members, on the other hand, react negatively to the possibility of sharing a similarly unfavorable status as their RLMX teammates (i.e., upward assimilation) and feel less confident about their capabilities (Buunk & Gibbons, 2007). This acts to reduce their motivation to perform better and lowers their satisfaction (Kemmelmeier & Oyserman, 2001). Thus, under high team identification and team supportive behavior conditions, RLMX is less influential in shaping individual self-efficacy and subsequent effectiveness.

In contrast, individuals with low identification with their team and little support from teammates may generalize contrast comparisons, such that differences with comparison teammates are highlighted. Thus, high RLMX members feel more content about their superiority and confident about themselves (i.e., downward contrast), and low RLMX members feel more anxious about their future and have lower self-efficacy (i.e., upward contrast). Thus, under low team identification and team supportive

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behavior conditions, RLMX has a stronger influence on individual members in terms of self-efficacy and subsequent individual effectiveness. Taken together, we expect that team identification and team supportive behavior moderate the mediating process of self-efficacy in the relationship between RLMX and individual effectiveness.

Hypothesis 6: The mediation of self-efficacy in the relationship between RLMX and (a) in-role performance, (b) OCB, and (c) job satisfaction is moderated by team identification, such that the mediation effect is weaker when team identification is high than when team identification is low.

Hypothesis 7: The mediation of self-efficacy in the relationship between RLMX and (a) in-role performance, (b) OCB, and (c) job satisfaction is moderated by team supportive behavior, such that the mediation effect is weaker when team supportive behavior is high than when team supportive behavior is low.

Method

Sample and Procedure

Data for this study were obtained from a division of a large beverage company in China, and all of the division's 45 teams, including 338 employees and 45 team leaders, were invited to participate. Employees worked in different functional teams such as planning, marketing, research and development, filling and packaging, quality control, after-sale service, and recycling. We assessed whether the work groups in the beverage company qualify as "real" teams based on Hackman's (2002) criteria. We found that each group has a common leader to supervise and monitor the process, a common goal, stable team membership (minimum team tenure greater than 10 months), and high task interdependence ($M = 5.29$ on a 1–7 scale; $SD = .97$). For instance, the common goal for R&D teams was to design a new soft drink, and team members may be assigned to test different flavors, mix the ingredients, maintain consistency in flavor, and design the bottle for the drink. Furthermore, participating teams are all traditional teams as interviews with human resource personnel in the company suggested that team members in each team worked in the same physical environment and had frequent face-to-face interactions on a daily basis.

Employees in the beverage company received a questionnaire, a return envelope, and a cover letter introducing the survey. Each questionnaire was coded with an identification number to match employees' responses

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with their immediate team leaders' evaluations. The leaders were formal leaders of higher status and responsible for evaluating team members' performance. The cover letter explained the objective of the survey and assured respondents of the confidentiality of their responses and the voluntary nature of participation in the survey. Individual members were asked to rate the quality of their LMX relationships, team supportive behavior, task interdependence, team identification, self-efficacy, and job satisfaction. Team leaders rated the in-role performance and OCB of their immediate subordinates (i.e., individual members). Individual members and team leaders could choose to fill out the surveys at work or outside of the workplace. Completed questionnaires were mailed back to us. Ten teams were excluded from the analyses because they lacked team leader-reported ratings of individual members' performance or had fewer than three individual members. The final sample of the study consisted of 35 teams and 275 leader–member dyads, culminating in effective response rates of 77.78%, 81.36%, and 77.78% for teams, individual members, and team leaders, respectively. The average team response rate of the final 35 teams was 90.16%, greater than the 60% threshold recommended by Timmerman (2005) and exceeding the response rates reported in organizational literature (e.g., Jansen & Kristof-Brown, 2005). Team sizes ranged from 4 to 14 members, with a mean of 7.86 members. In the team leader sample, 65.7% were men, the mean age was 42.20, and mean team tenure was 3.61 years. In the team member (excluding the team leader) sample, 52% were men, and 100% had been educated to college level or above. The mean age, organizational tenure, team tenure, and dyadic tenure were 30.15, 4.43, 2.93, and 2.33 years, respectively. We conducted *t*-test analyses to test for any demographic differences between the nonrespondents and respondents. The results showed that there were no significant differences between nonrespondents and respondents in terms of their demographic information such as sex ($t = .99$, $p > .05$), education ($t = .01$, $p > .10$), and team tenure ($t = 1.88$, $p > .05$), and their ratings of main study variables including LMX ($t = .29$, $p > .05$), team identification ($t = 1.79$, $p > .05$), team supportive behavior ($t = -.79$, $p > .05$), and self-efficacy ($t = -.38$, $p > .05$), suggesting that our findings would not be biased by the missing team members and teams.

Measures

Each measure had a response scale ranging from 1 = *strongly disagree* to 7 = *strongly agree* except where otherwise noted.

Relative leader–member exchange (RLMX). RLMX was obtained from LMX, which was measured by using Liden and Maslyn's (1998)

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12-item LMX multidimensional measure (LMX-MDM) scale. A sample item is "My supervisor would defend me to others in my company if I made an honest mistake" ($\alpha = .96$). Previous research measured RLMX by subtracting the mean individual-level LMX score for each team from each individual team member's LMX score (Graen, Liden, & Hoel, 1982; Henderson et al., 2008). However, as suggested by Edwards (1993, 1994), this approach may ignore the interdependence between LMX and team-level LMX and their interactions in assessing the effects of RLMX. In addition, perceptual evaluation of one's LMX standing within the team would be an optional approach for measuring RLMX. However, it may omit information concerning the potential influence of LMX from the team level of analysis on individual outcomes. For instance, two individuals from two different teams can both perceive themselves as the highest ranking within their teams in terms of their LMX score. However, the meaning of this perception may vary greatly depending on whether the average LMX in the team is high or low. Therefore, we considered Edwards' (1993, 1994) suggestion for using polynomial regression in congruence research as described in the Analysis section.

Team supportive behavior. We asked individual members to rate their perceptions of team members' overall supportive behavior using Aubé and Rousseau's (2005) 5-item scale. Sample items are "we cooperate to get the work done" and "we recognize and value the contribution of each member to task accomplishment." Individuals' evaluations of team supportive behavior were aggregated to form team-level supportive behavior. $R_{wg\ (j)}$ was used to test the viability of aggregating individual responses in order to create this team-level variable (James, Demaree, & Wolf, 1984). The mean $r_{wg\ (j)}$ value of team supportive behavior, .96, was well above the conventionally acceptable $r_{wg\ (j)}$ value of .70. Furthermore, interclass correlations (ICC1) and reliability of team means (ICC2) were used to test between-team variance and within-team agreement (Bliese, 2000). Based on one-way analyses of variance, the ICC values showed high between-team variance and within-team agreement, ICC1, .13, and ICC2, .54, $F = 3.22$, $p < .001$. Even though the relatively low ICC2 may make it difficult to detect emergent relationships using team means (Bliese, 2000), the high $r_{wg\ (j)}$ value and between-team variance significance justified our aggregation (Chen & Bliese, 2002). Thus, aggregating the responses to the team level was deemed appropriate ($\alpha = .91$).

Team identification. Team identification was assessed by team members using four items taken from Mael and Ashforth's (1992) six-item organizational identification scale. The other two items from Mael and Ashforth's (1992) measure were not selected because they do not suit the team context. The reference was changed from "organization" to the "team." Example items were "When someone criticizes my team, it feels

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like a personal insult"; and "When I talk about this team, I usually say 'we' rather than 'they'" ($\alpha = .88$).

Self-efficacy. Team members rated their self-efficacy beliefs using Spreitzer's (1995) three-item scale, which was an adapted version of Jones' s (1986) self-efficacy scale. An example item is "I am confident about my ability to do my job" ($\alpha = .83$).

Job satisfaction. We used Cammann, Fichman, Jenkins, and Klesh's (1979) three-item scale to measure job satisfaction. Sample items were "All in all, I am satisfied with my job" and "In general, I don't like my job" (reversed score; $\alpha = .90$).

In-role performance. Team leaders evaluated individual members' job performance, using Williams and Anderson's (1991) six-item scale. An example item is "This employee fulfills all the responsibilities specified in his/her job description" ($\alpha = .82$).

Organizational citizenship behavior. Team leaders also rated individual members' citizenship behaviors using Williams and Anderson's (1991) six-item scale. Sample items are "This employee helps others who have been absent"; and "This employee takes time to listen to coworkers' problem and worries ($\alpha = .79$).

Control variables. LMX differentiation (i.e., the variance of LMX scores within each team) was explored as a possible control variable due to its influence on individual performance (Liden et al., 2006). Task interdependence was considered to be controlled because it may influence individual performance (Wageman & Baker, 1997). Liden, Wayne, and Bradway's (1997) three-item task interdependence scale was aggregated to the team level ($r_{wg\ (j)} = .95$, ICC1 $= .29$, ICC2 $= .65$, $F = 9.97$, $p < .001$). We also included sex, age, and tenure as potential control variables as they may impact self-efficacy and job performance (e.g., Heilman, Martell, & Simon, 1988). Only variables that were significantly correlated with our variables of interest were included in subsequent analyses (Becker, 2005).

Analysis. To test the effects of RLMX on individual outcomes, we applied the polynomial regression technique and response surface methodology (Edwards, 1994; Edwards & Parry, 1993). Compared to alternative approaches, such as absolute difference scores, to measure RLMX (e.g., Henderson et al., 2008), the polynomial regression approach is more advanced in that it is able to precisely determine the effects of the components of RLMX (i.e., LMX and TLMX; Edwards, 1994; Edwards & Parry, 1993).[1] By following Edwards and Parry's (1993) approach, we

[1] Because theory and empirical research did not suggest a curvilinear relationship between RLMX and self-efficacy, in-role performance, OCB, and satisfaction, we did not anticipate the significant effects of the higher order terms on the outcome variables (Vidyarthi et al., 2010). However, we ran additional polynomial regression analyses with the

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treated RLMX as the incongruence between LMX and TLMX and the parameter estimate of RLMX as the subtraction between the coefficients of LMX and TLMX (e.g., Vidyarthi et al., 2010). The slope of the incongruence line ($X = -Y$; i.e., $\gamma_{30} - \gamma_{02}$) represents the nature of the effects of RLMX on individual outcomes. As Edwards (2001, 2007) indicated, a positive value for $\gamma_{30} - \gamma_{02}$ at the point of $X = 0$, $Y = 0$ suggests the surface is increasing along the $X = -Y$ line, such that as the incongruence between LMX and TLMX (i.e., RLMX) increases, individual outcomes (i.e., in-role performance, OCB, and job satisfaction) increase. The statistical significance of the slopes was tested using multilevel bootstrapping within SAS (Jansen & Kristof-Brown, 2005).

Because our theoretical model consists of constructs at both the individual- and team-level of analysis, we applied hierarchical linear modeling (HLM) to test all the hypotheses. HLM was also used because leaders evaluated multiple individual members' in-role performance and OCB, causing these ratings to lack independence. HLM can help adjust the error term for lack of independence among variables. We first estimated null models using HLM without any specified predictors to test the significance of between-group variance in the outcomes by examining the significance level of the Level-2 residual variance of the intercept (τ_{00}) and ICC1. The significant results of between-team variance in self-efficacy ($\tau_{00} = .22$, $\chi^2\,(34) = 60.29$, $p < .01$, ICC1 = .14), in-role performance ($\tau_{00} = .22$, $\chi^2\,(34) = 170.32$, $p < .001$, ICC1 = .33), OCB ($\tau_{00} = .23$, $\chi^2\,(34) = 194.02$, $p < .001$, ICC1 = .23), and job satisfaction ($\tau_{00} = .20$, $\chi^2\,(34) = 108.28$, $p < .001$, ICC1 = .20) justified our use of HLM. Next, we incorporated the polynomial regression model within HLM to test our hypotheses. RLMX was operationalized as the divergence between LMX

higher order terms included to rule out their potential effects. At the first step, we analyzed the hypothesized models with only the higher order terms included (i.e., the curvature of estimated surface, $LMX^2 - LMX \times TMX + TMX^2$). That is, we included LMX^2, $TLMX^2$, LMX × TLMX in testing Hypotheses 1, and 3–7, and, LMX^2 × Team identification, $TLMX^2$ × Team identification, and LMX × TLMX × Team identification in testing H4 and H6, and LMX^2 × Team supportive behavior, $TLMX^2$ × Team supportive behavior, and LMX × TLMX × Team supportive behavior in testing H5 and H7. The results showed that the higher order terms were significantly related to self-efficacy ($r = .61$, $p < .01$) in testing H4/5 and in-role performance ($r = .53$, $p < .01$) in testing H6a/7a, but not significantly related to OCB or job satisfaction. At the second step, to more precisely examine whether the higher order terms explained unique variance on the study variables, we included both the higher order terms and the linear terms. Results showed that the curvature of the estimated surface consisting of the higher-order terms (i.e., $LMX^2 - LMX \times TMX + TMX^2$) all became insignificant, suggesting the absence of nonlinear relationships. Furthermore, results did not show sufficient pseudo-R^2 change after the addition of these higher order terms in respective hypothesis testing, indicating that the inclusion of these higher order terms did not explain additional variance that resides in self-efficacy, in-role performance, OCB, and job satisfaction. Therefore, the results provided evidence that it was best to include only the linear terms in testing our hypothesized models.

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(Level-1) and TLMX (Level-2). We scale centered all predictor variables by subtracting the scale midpoint to reduce multicollinearity and facilitate interpretation (Edwards, 1994). Further, in order to calculate effect size, we calculated pseudo-R^2 values to determine if the inclusion of predicator variables explains meaningful levels of additional variance in the outcomes (Randenbush & Bryk, 2002).

To test the moderating effects of team identification and team supportive behavior, we multiplied both LMX and TLMX by the moderators (i.e., team identification and team supportive behavior) in the equations. The parameter estimates of interaction effects between RLMX and the moderators on the outcome variables were computed by subtracting coefficients of LMX $\times$ team identification/team supportive behavior and TLMX $\times$ team identification/team supportive behavior, and statistical significance was tested within SAS. Pseudo-R^2 change tests were used to estimate the effect size for the interaction. Three-dimensional surfaces were plotted when the parameter estimates were significant and the pseudo-R^2 change tests showed significant results.

Results

The means, standard deviations, correlations, and reliabilities of all the variables are presented in Table 1.

Table 2 presents the HLM results testing the multilevel polynomial effects of RLMX on individual outcomes. Before testing the hypotheses, we first tested three HLM models to examine whether the potential control variables were significantly related to the dependent variables. Excluding variables that were not significantly related to the dependent variables can avoid unnecessarily reducing statistical power (Becker, 2005). As shown in Table 2, the results indicated that sex, dyadic tenure, and task interdependence were significantly related to at least one of the dependent variables (i.e., self-efficacy, in-role performance, OCB, and job satisfaction), whereas the other variables (i.e., age, organizational tenure, team tenure, team size, and LMX differentiation) did not show significant relationships with any of the outcome variables. Therefore, we included sex, dyadic tenure, and task interdependence as controls in all models for hypotheses testing.

Mediation results. Hypothesis 1 stated that RLMX is positively related to self-efficacy. As shown in Model 2, Table 2, the polynomial regression results suggested that RLMX was significantly related to self-efficacy ($\gamma_{30} - \gamma_{02} = .63$, $p < .01$). Furthermore, the pseudo-R^2 tests showed that the addition of RLMX (i.e., the divergence between LMX and TLMX) explained an additional 8% total variance in self-efficacy. Thus, Hypothesis 1 was supported.

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TABLE 1
Means, Standard Deviations, Correlations, and Reliabilities of Measures

	Mean	*SD*	1	2	3	4	5	6	7	8	9	10	11
Individual-level variables													
1. Sex	.48	.50	–										
2. Age	30.15	4.34	.02	–									
3. Organizational tenure (years)	4.43	3.64	.10	.65**	–								
4. Team tenure (years)	2.93	2.80	.11	.48**	.74**	–							
5. Dyadic tenure (years)	2.33	1.74	.12	.33**	.56**	.74**	–						
6. LMX	4.67	.93	.17	.02	−.02	−.05	.09	(.96)					
7. Self-efficacy	5.51	.74	.18	.02	.10	.10	.16**	.24**	(.83)				
8. Team identification	5.32	.96	.35	.00	−.01	−.02	.08	.48**	.40**	(.88)			
9. Job performance	4.92	.82	.12	.12*	.15*	.09	.17**	.43**	.33**	.36**	(.82)		
10. OCB	5.11	.76	.15	.16**	.11	.07	−.02	.34**	.19**	.33**	.46**	(.79)	
11. Job satisfaction	5.02	.98	.26	.05	.04	−.01	.01	.58**	.33**	.49**	.42**	.32**	(.90)
Team-level variables													
1. Team size	7.86	2.67	–										
2. TLMX	4.67	.59	.01	–									
3. LMX differentiation	.78	.29	.15	−.38	–								
4. Task interdependence	5.29	.97	−.09	.44**	−.15	(.86)							
5. Team supportive behavior	5.28	.67	−.04	.48**	−.16	.66**	(.91)						

Note. $N = 275$ for individuals; $N = 35$ for teams. LMX = leader–member exchange. TLMX = team-level leader–member exchange. Cronbach reliabilities are in parentheses along the main diagonal.
*$p < .05$. **$p < .01$.

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TABLE 2
HLM Results for the Mediating Role of Self-Efficacy in the Relationships Between RLMX and Individual Outcomes

	Self-efficacy				In-role performance					
	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10
Control variables:										
Sex, γ_{10}	.11	.04	−.01	.01	.19**	.10	.14	.08	.10	.09
Dyadic tenure, γ_{20}	.07*	.05	.04	.01	.11***	.08*	.09**	.07*	.06*	.06*
Task interdependence, γ_{01}	.16*	.19*	.04	.05	.25	.19	.19	.14	.20	.19
Independent variables:										
LMX, γ_{30}		.28**	.15*	.14*		.33***		.27***	.33*	.27
TLMX, γ_{02}		−.35**	−.33**	−.34**		−.15		−.06	−.31	−.18
RLMX, $\gamma_{30} - \gamma_{02}$		.63**	.48**	.48**		.48**		.33*	.64**	.45**
Mediator:										
Self-efficacy, γ_{40}							.33***	.25***		.31**
Moderators										
TI, γ_{50}			.28**	.15*					−.02	−.06
TSB, γ_{03}			.01	.13					.01	.04
Interactions:										
LMX × TI, γ_{60}				−.09					−.18*	−.16*
TLMX × TI, γ_{51}				.28*					.28*	.24*
RLMX × TI, $\gamma_{60} - \gamma_{51}$				−.37**					−.46**	−.40**
LMX × TSB, γ_{31}				−.08					−.13	−.12
TLMX × TSB, γ_{04}				.15*					.12	.12
RLMX × TSB, $\gamma_{31} - \gamma_{04}$				−.23*					−.25*	−.24*
Self-efficacy × TI, γ_{70}									−.00	
Self-efficacy × TSB, γ_{51}									−.08	
$R^2_{\text{total}}{}^a$	.01	.09	.21	.37	.09	.20	.48	.24	.26	.54
$\delta R^2_{\text{total}}$		.08	.15	.16		.13	.39	.05	.05	.28

continued

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TABLE 2 (continued)

	OCB						Job satisfaction					
	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20	M21	M22
Control variables:												
Sex, γ_{10}	.05	.02	.05	.00	.03	.01	.29**	.12	.24*	.11	.07	.07
Dyadic tenure, γ_{20}	.01	.00	.01	.00	.00	.00	.03	−.02	.00	−.03	−.05	−.05
Task interdependence, γ_{01}	.35***	.32***	.35***	.29**	.36***	.35**	.40***	.28**	.35**	.25**	.17	.15
Independent variables:												
LMX, γ_{30}		.22**		.17*	.13	.09		.61***		.54***	.44*	.43*
TLMX, γ_{02}		−.08		−.07	−.23	−.12		−.23		−.15	−.30*	−.45*
RLMX, $\gamma_{30} - \gamma_{02}$		.30*		.24	.36*	.21		.84***		.69**	.73**	.88**
Mediator:												
Self-efficacy, γ_{40}			.23**	.18**		.17**			.34***	.18**		.16
Moderators												
TI, γ_{50}					.04	−.01					.11	.07
TSB, γ_{03}					−.08	−.10					.17	.16
Interactions:												
LMX × TI, γ_{60}					−.13	−.12					−.16*	−.20*
TLMX × TI, γ_{51}					.11	.10					.28***	.33**
RLMX × TI, $\gamma_{60} - \gamma_{51}$					−.24*	−.22*					−.44**	−.53**
LMX × TSB, γ_{31}					.16	.16					.11	.16
TLMX × TSB, γ_{04}					.10	.08					−.01	−.05
RLMX × TSB, $\gamma_{31} - \gamma_{04}$					.06	.08					.12	.21
Self-efficacy × TI, γ_{70}						−.11						−.15
Self-efficacy × TSB, γ_{51}						−.07						.10*
R^2_{total}[a]	.14	.48	.50	.54	.53	.57	.10	.18	.35	.39	.45	.45
$\delta R^2_{\text{total}}$		.34	.36	.06	.05	.04		.08	.25	.17	.27	.00

Note. $N = 275$ (level 1); $N = 35$ (level 2). M = model; LMX = leader–member exchange; TLMX = team-level mean leader–member exchange; TI = team identification; TSB = team supportive behavior.

[a] R^2_{total} is calculated based on the proportional reduction of within-group and between-group error variance due to the independent variables (Snijders & Bosker, 1999).

*$p < .05$. **$p < .01$. ***$p < .001$.

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Hypothesis 2 proposed that self-efficacy is positively related to (a) in-role performance, (b) OCB, and (c) job satisfaction. The results in Table 2 demonstrated the positive relationships between self-efficacy and in-role performance ($\gamma_{40} = .33$, $p < .001$, Model 7), OCB ($\gamma_{40} = .23$, $p < .01$, Model 13), and job satisfaction ($\gamma_{40} = .34$, $p < .001$, Model 19). The pseudo-R^2 tests further revealed that the inclusion of self-efficacy explained additional 39%, 36%, and 25% variance in in-role performance, OCB, and job satisfaction, respectively. Therefore, Hypothesis 2a, b, and c were all supported.

Hypothesis 3 posited that self-efficacy partially mediates the relationship between RLMX and (a) in-role performance, (b) OCB, and (c) job satisfaction. We followed the procedures described in Kenny, Kashy, and Bolger (1998) and Mathieu and Taylor (2007) for testing meso-mediational relationships. That is, at the first step, RLMX needs to be related to individual outcomes. As shown in Table 2, RLMX was significantly and positively related to in-role performance ($\gamma_{30} - \gamma_{02} = .48$, $p < .01$, Model 6), OCB ($\gamma_{30} - \gamma_{02} = .30$, $p < .05$, Model 12), and job satisfaction ($\gamma_{30} - \gamma_{02} = .84$, $p < .001$, Model 18). Furthermore, pseudo-R^2 tests showed that the inclusion of RLMX (i.e., the divergence between LMX and TLMX) explained an additional 13% of the total variance in in-role performance, 34% in OCB, and 8% in job satisfaction. The second step of this procedure requires RLMX to be significantly related to self-efficacy, which was supported in our testing of Hypothesis 1. In the third and fourth steps, we included both RLMX and self-efficacy as predictors in the regression models. We found that self-efficacy was significantly related to in-role performance ($\gamma_{40} = .25$, $p < .001$, Model 8), OCB ($\gamma_{40} = .18$, $p < .01$, Model 14), and job satisfaction ($\gamma_{40} = .18$, $p < .01$, Model 20). It was also discovered that RLMX was no longer significantly related to OCB ($\gamma_{30} - \gamma_{02} = .24$, *ns*, Model 14) and that the effect of RLMX on in-role performance ($\gamma_{30} - \gamma_{02} = .33$, $p < .05$, Model 8) and job satisfaction ($\gamma_{30} - \gamma_{02} = .69$, $p < .01$, Model 20) remained significant but reduced in magnitude compared with the coefficients in Step 1. The pseudo-R^2 test indicated that self-efficacy explained 5% of the variance in in-role performance, 6% in OCB, and 17% in job satisfaction. Furthermore, we employed the PRODCLIN program developed by MacKinnon, Fritz, Williams, and Lockwood (2007) for testing the significance for the indirect effect that RLMX has on individual outcomes via self-efficacy. The PRODCLIN program assesses the indirect effect by generating asymmetric confidence intervals (CIs) for the product terms of the indirect effects, which have non-normal distributions, and thus provides a more accurate estimation of the indirect effect than traditional Sobel tests (Liao et al., 2010; MacKinnon et al., 2007). The PRODCLIN program results suggested that the indirect effects of RLMX on individual

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effectiveness were all significant: for in-role performance, the 95% asymmetric CI was .07, .25, excluding zero; for OCB, the CI was .02, .21, excluding zero; and for job satisfaction, the CI was .01, .22, excluding zero. Taken together, these results indicated a partial mediation for self-efficacy in the relationship between RLMX and in-role performance (Hypothesis 3a) and job satisfaction (Hypothesis 3c), and a full mediation for self-efficacy in the relationship between RLMX and OCB (Hypothesis 3b). Therefore, Hypotheses 3a and c were partially supported and Hypothesis 3b was supported.

Moderation Results

Hypothesis 4 proposed a negative interaction between RLMX and team identification in explaining self-efficacy, such that RLMX is less positively related to self-efficacy when team identification is high. Hypothesis 5 posited a similar pattern of interaction between RLMX and team supportive behavior in relating to self-efficacy such that RLMX is less positively related to self-efficacy only when team supportive behavior is high. As revealed in Table 2, after including the original predictors at Step 1 (Model 2), and team identification and team supportive behavior at Step 2 (Model 3), the two interaction terms were added in the model at the final step (Model 4). Results in Model 4 showed that the strength of the positive relationship between RLMX and self-efficacy became weaker as team identification increased ($\gamma_{60} - \gamma_{51} = -.37$, $p < .01$) and as team supportive behavior increased ($\gamma_{31} - \gamma_{04} = -.23$, $p < .05$). The pseudo-R^2 results indicated that 16% of the total variance in self-efficacy was attributable to the two interactions. To further determine the nature of the interactions, we plotted the three-dimensional surfaces for RLMX and self-efficacy at higher team identification/team supportive behavior (1 *SD* above) and lower team identification/team supportive behavior (1 *SD* below) conditions (Aiken & West, 1991). Consistent with Hypothesis 4, when team identification was high (Fig. 2a), the surface was essentially flat along the $X = -Y$ line (simple slope test: $\gamma_{30} + \gamma_{60}Z_{\mathrm{H}} - \gamma_{02} - \gamma_{51}Z_{\mathrm{H}} = .12$, $p > .05$), which indicates that individual members' self-efficacy beliefs are not significantly impacted by their RLMX ratings when team identification is high. Conversely, when team identification was low (Fig. 2b), the slope along the $X = -Y$ line was significant and consistent with our hypothesis (simple slope test: $\gamma_{30} + \gamma_{60}Z_{\mathrm{L}} - \gamma_{02} - \gamma_{51}Z_{\mathrm{L}} = .84, p < .001$). A closer visual examination of Figure 2(b) reveals that self-efficacy was higher when LMX was higher than TLMX (i.e., the area of triangle ABD, on the $X > Y$ side of the $X = Y$ line) than when LMX was lower than TLMX (i.e., the area of triangle BCD, on the $X < Y$ side of the $X = Y$ line). This pattern suggests that RLMX was positively related

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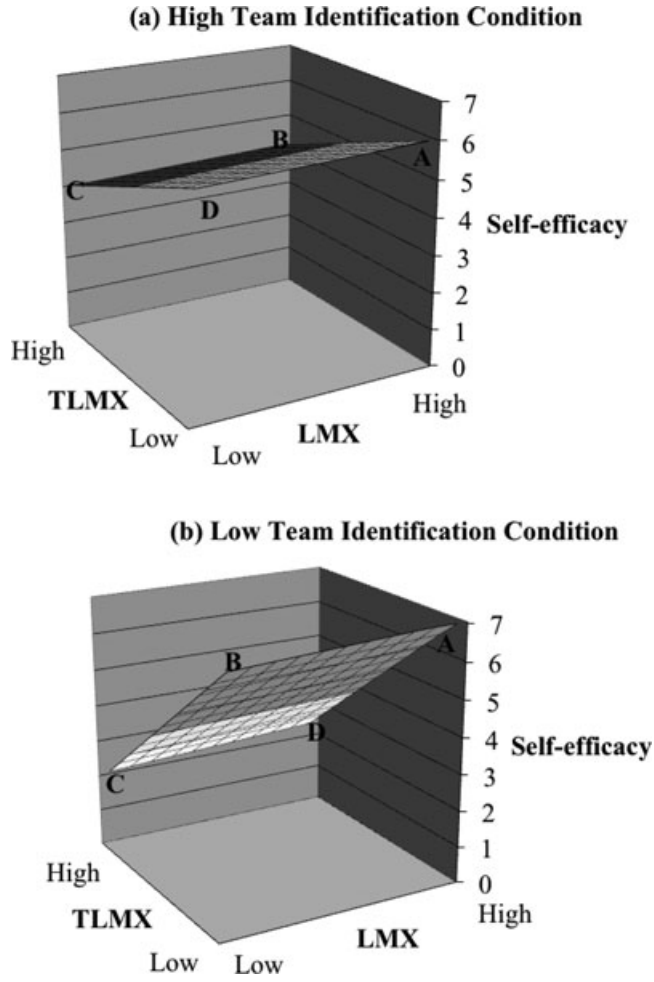

Figure 2: **The Relationship Between RLMX and Self-Efficacy at (a) High and (b) Low Levels of Team Identification.**

Note. LMX = leader–member exchange; TLMX = team-level mean leader–member exchange.

to self-efficacy under the low team identification condition. Therefore, Hypothesis 4 was supported. Similarly, as presented in Figure 3, we found that RLMX was more positively related to self-efficacy for teams with less supportive behaviors (simple slope test: $\gamma_{30} + \gamma_{31}Z_{\mathrm{L}} - \gamma_{02} - \gamma_{04}Z_{\mathrm{L}} = .63, p < .01$) than for those with more supportive behaviors (simple slope test: $\gamma_{30} + \gamma_{31}Z_{\mathrm{H}} - \gamma_{02} - \gamma_{04}Z_{\mathrm{H}} = .33, p < .05$). Therefore, Hypothesis 5 was supported.

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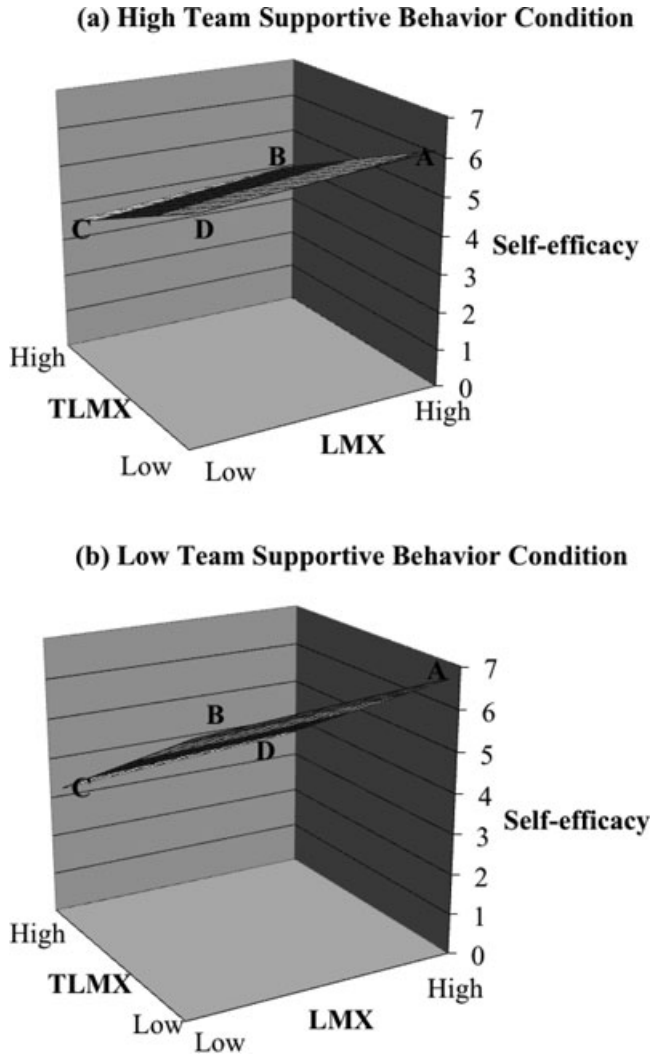

Figure 3: **The Relationship between RLMX and Self-Efficacy at (a) High and (b) Low Levels of Team Supportive Behavior.**

Note. LMX = leader–member exchange; TLMX = team-level mean leader–member exchange.

Moderated Mediation Results

Hypothesis 6 proposes moderated mediation, such that team identification moderates the mediation of self-efficacy in the relationship

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between RLMX and (a) in-role performance, (b) OCB, and (c) job satisfaction. We tested these moderated mediation models following the moderated path analytic approach (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002), which estimates the first-stage, second-stage, direct, and overall indirect effects (Edwards & Lambert, 2007). The results reported in Table 3 demonstrated that the indirect effect of RLMX on in-role performance and OCB through self-efficacy was significantly moderated by team identification ($\Delta\gamma = -.24, p < .05$ for in-role performance as the outcome; and $\Delta\gamma = -.29, p < .05$ for OCB as the outcome). However, the moderated mediation effect for job satisfaction as the outcome variable was not significant ($\Delta\gamma = -.02$, *ns*). In addition, results of Table 3 showed that the origin of team identification's moderating role in the indirect effect of RLMX on in-role performance/OCB via self-efficacy came from its moderating effect on the relationship between RLMX and self-efficacy (i.e., the first-stage effect; $\Delta\gamma = -.71, p < .01$). Team identification did not moderate the relationship between self-efficacy and in-role performance/OCB (i.e., the second-stage effects; $\Delta\gamma = .00$, *ns* for in-role performance as the outcome; $\Delta\gamma = -.21$, *ns* for OCB as the outcome). The PRODCLIN program (MacKinnon et al., 2007) further demonstrated that the indirect effect of the interaction between RLMX and team identification through self-efficacy on in-role performance and OCB were both significant: for in-role performance, 95% of the asymmetric CI = [–.16, –.02], excluding zero; for OCB, 95% of the asymmetric CI = [–.14, –.01], excluding zero. Figures 4 and 5 described the nature of the indirect effects of RLMX on in-role performance (Figure 4) and OCB (Figure 5) at higher levels (1 *SD* above) and lower levels (1 *SD* below) of team identification. Specifically, the indirect effect of RLMX on in-role performance via self-efficacy was significantly positive when team identification was low (indirect effect$_{low} = .27, p < .05$) but nonsignificant when team identification was high (indirect effect$_{high} = .03$, *ns*). Similarly, the indirect effect of RLMX on OCB via self-efficacy was significantly positive when team identification was low (indirect effect$_{low} = .31, p < .05$) but nonsignificant when team identification was high (indirect effect$_{high} = .02$, *ns*). Taken together, Hypothesis 6a and b were supported, but Hypothesis 6c was not supported.

Similarly, Hypothesis 7 describes moderated mediation in which team supportive behavior moderates the mediation of self-efficacy in the relationship between RLMX and (a) in-role performance, (b) OCB, and (c) job satisfaction. As shown in Table 3, following the same procedure in the testing of Hypothesis 6, we found that the differences of the indirect effects of RLMX on (a) in-role performance, (b) OCB, and (c) job satisfaction through self-efficacy under high and low team supportive behavior conditions were not significant ($\Delta\gamma = -.10$, *ns* for in-role performance as the outcome; $\Delta\gamma = -.03$, *ns* for OCB as the outcome; and

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TABLE 3
Results of the Moderated Path Analysis

	Stage						Effect					
	First			Second			Direct			Indirect		
Moderator variable	IP	OCB	JS	IP	OCB	JS	IP	OCB	JS	IP	OCB	JS
Team identification												
High team identification	.12	.12	.12	.31*	.15	.26*	.08	.08	.37**	.03	.02	.03
Low team identification	.84**	.84**	.84**	.31*	.37*	.06	.84**	.44*	1.39**	.27*	.31*	.05
Differences	−.71**	−.71**	−.71**	.00	−.21	.19*	−.77**	−.36*	−1.02**	−.24*	−.29*	−.02
Team supportive behavior												
High team supportive behavior	.33**	.33**	.33**	.26*	.21*	.06	.27*	.26*	.27*	.10	.07	.02
Low team supportive behavior	.63**	.63**	.63**	.36**	.31**	.26*	.65*	.16	.65*	.20*	.10	.17
Differences	−.31**	−.31**	−.31**	−.11	−.09	−.20*	−.38*	.11	−.38*	−.10	−.03	−.15

Note. IP = in-role performance as the outcome variable; OCB = organizational citizenship behavior as the outcome variable; JS = job satisfaction as the outcome variable.
*$p < .05$. **$p < .01$.

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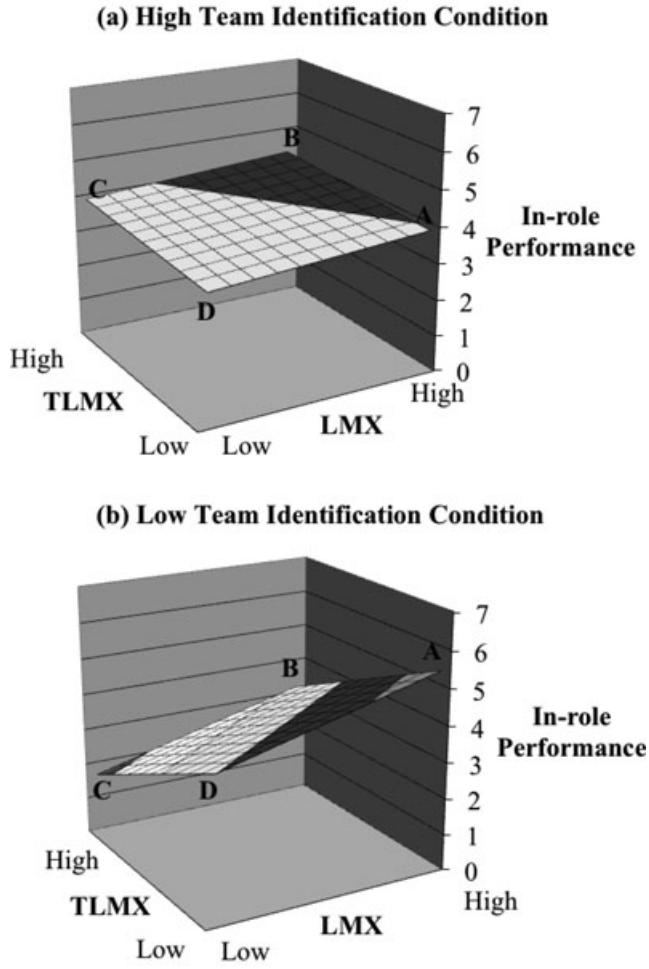

Figure 4: **The Indirect Interactive Effect of RLMX and Team Identification on In-Role Performance via Self-Efficacy.**

Note. LMX = leader–member exchange; TLMX = team-level mean leader–member exchange.

$\Delta\gamma = -.15$, *ns* for job satisfaction as the outcome). Therefore, Hypothesis 7 was not supported.

Supplementary Analysis

In this research, we focused on how team contextual factors may shape the way individual members respond to RLMX. Specifically,

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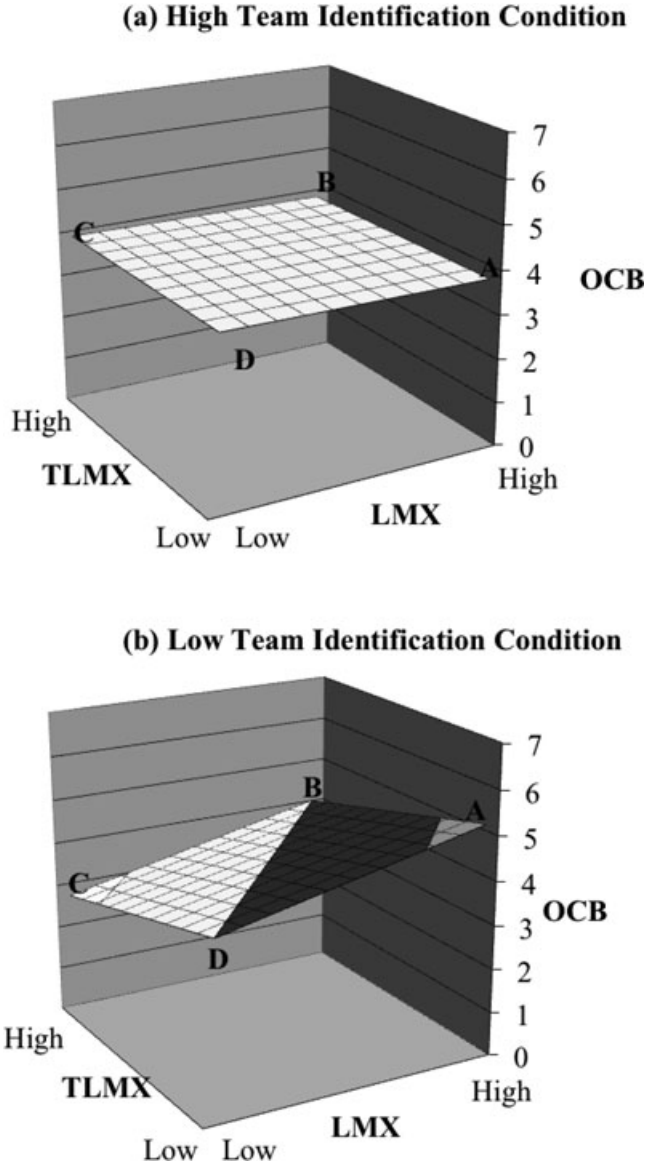

Figure 5: **The Indirect Interactive Effect of RLMX and Team Identification on OCB via Self-Efficacy.**

Note. LMX = leader–member exchange; TLMX = team-level mean leader–member exchange.

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we expected that the objective RLMX information and team identification/team supportive behavior develop independently and thus team contexts can serve as moderators in the relationships between RLMX and self-efficacy and individual effectiveness. However, one may argue that individuals' RLMX standings may cause them to rethink their perceptions of the team and reshape their identification to the team and feelings of team support. Thus, we proceeded with a series of supplementary analyses to test alternative models where team contexts serve as mediators in the relationships between RLMX and individual outcomes. The results showed that after including the control variables and RLMX in the model, neither team identification ($\gamma = .21$, $p = .06$) nor team supportive behavior ($\gamma = .01$, $p = .87$) were significantly related to self-efficacy. That is, neither team identification nor team supportive behavior mediated the relationship between RLMX and self-efficacy beliefs. Thus, the alternative explanation of the relationships among RLMX, team contexts, and self-efficacy was not supported by the data from this study.

In sum, we found that RLMX was positively related to self-efficacy, which in turn positively related to in-role performance, OCB, and job satisfaction, supporting Hypotheses 1 and 2. Further, we found that self-efficacy partially mediated the relationship between RLMX and in-role performance and job satisfaction and fully mediated the relationship between RLMX and OCB, providing partial support for Hypotheses 3a and c and full support for Hypothesis 3b. Hypotheses 4 and 5 were both fully supported, suggesting that RLMX was less positively related to self-efficacy when team identification is high and when team supportive behavior is high. In addition, the results supported the moderated mediation described in Hypotheses 6a and b, which indicates that the indirect effects of RLMX on in-role performance and OCB via self-efficacy were positive only when team identification was low.

Discussion

Integrating social comparison theory with literatures on LMX and teams, we tested a multilevel model to link RLMX with individual in-role performance, OCB, and job satisfaction within team contexts. A key contribution of the study is that we help to answer questions of *how* and *when* RLMX affects individual attitudes and performance outcomes. We underscored the mediating role of self-efficacy through which RLMX impacts individual attitudinal and behavioral outcomes. Furthermore, we presented two team contextual factors (i.e., team identification and team supportive behaviors) as boundary conditions for the effects of RLMX on self-efficacy and subsequently individual effectiveness. The findings

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in this study offer several theoretical contributions to the LMX, team, and social comparison literatures.

Theoretical Implications

The study extends the emerging research on multilevel LMX by exploring the interplay between one's own LMX and others' LMX at the team level (RLMX) and the mechanism through which RLMX impacts individual outcomes. Using multilevel polynomial regression analyses, our findings supported our hypothesis that RLMX affects in-role performance, OCB, and job satisfaction through the mediating role of self-efficacy. This finding fits well with social comparison theory (Festinger, 1954), suggesting that people form self-evaluations by comparing themselves with similar others. Specifically, RLMX reflects the actual level of one's LMX standing within the team, which provides a reference point and context for individual members to obtain their social comparative evaluations (Henderson et al., 2008; Vidyarthi et al., 2010) and form self-efficacy beliefs, in turn, leading to individual attitudinal and behavioral reactions (Greenberg et al., 2007; Mussweiler, 2003).

What stands out most from this study compared with previous research lies in the new perspective of the contexts within teams in which the social comparison effects of RLMX are important. Previous studies have tended to assume that the social comparison results of RLMX necessarily lead to positive outcomes. However, a more complete look at social comparison theory implies that the positive value of RLMX on self-evaluation and outcomes is contingent on the extent to which the actor perceives similarity with the comparison targets (Buunk et al., 1990; Ybema & Buunk, 1995). Rather than studying LMX in isolation, we examined RLMX as it is naturally embedded within a larger team context by investigating team identification and team supportive behavior as part of the process that influences the relationships among RLMX, self-efficacy, and outcomes. Specifically, the cross-level polynomial regression model showed that RLMX was not significantly related to self-efficacy when team identification was high and was less positively related to self-efficacy when team supportive behavior was high. Furthermore, the results demonstrated that the mediation of self-efficacy in the relationship between RLMX and in-role performance was stronger when team identification was low. These effects are consistent with the assimilation–contrast model of social comparison (Buunk et al., 1990), which suggests that the way individual members respond to RLMX depends on how they interpret the social comparison information and whether they assimilate or contrast themselves with their fellow teammates. Team identification and supportive behavior induce individual members' assimilative responses to RLMX.

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Thus, when team identification and supportive behavior are high, individuals with high RLMX deflate their self-efficacy and lower their performance outcomes, whereas those with low RLMX ratings tend to raise confidence in their capabilities and boost their motivation to perform well. Also relevant is the substitutes for leadership theory (Kerr & Jermier, 1978), which notes that the need for self-validation from the leader is lessened in the presence of support being provided by coworkers (Chiaburu & Harrison, 2008; cf. Dionne, Yammarino, Atwater, & James, 2002). When surrounded by team members who support and help with each other's work, value each other's contributions, and care about each other's well-being, individual members are likely to evaluate their own capabilities positively and feel valued and accepted by the team. This, in turn, reduces the value of the social comparative evaluations resulting from RLMX standing. Our results suggest that ignoring the boundary conditions in teams when assessing the effects of RLMX on self-evaluation may provide a narrow picture of the theoretical implications of RLMX. In addition, our results did not support the integrated moderated mediation models with team supportive behavior as the moderator. This indicates that although team supportive behavior altered the way RLMX shapes self-efficacy, it did not affect the mediating role of self-efficacy in the RLMX–individual effectiveness link. That is, individuals' self-efficacy beliefs linked the influence of RLMX comparison information on their subsequent performance outcomes and satisfaction regardless the level of support individuals gained from their teammates.

It is important to note that research on RLMX is related to another LMX research stream: LMX differentiation. Both RLMX and LMX differentiation emphasize the basic assumption of LMX theory that leaders tend to differentiate their treatment toward subordinates in the team, and both capture the LMX phenomenon within the broader contexts of work teams. However, RLMX and LMX differentiation are two distinct constructs in that RLMX emphasizes the interaction between LMX and the average LMX within the team and reflects the relative and unique standing of each individual member in the team, whereas LMX differentiation is a team-level phenomenon that captures the variability in LMX relationships across the whole team. Recent work (Henderson et al., 2008) integrated LMX differentiation and RLMX concepts and found that LMX differentiation strengthened the positive impact of RLMX on psychological contract fulfillment (i.e., the extent to which employees perceive that their organization has fulfilled their implicit obligations, Rousseau, 1995). Another recent study on LMX differentiation (Liao et al., 2010) showed that LMX was only positively related to self-efficacy and individual creativity when LMX differentiation was low. Beyond these studies, this investigation contributes to the LMX differentiation literature, and more broadly multilevel LMX research, by exploring how team contextual factors shape the way

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individual members respond to RLMX, which results from differentiated LMX relationships in the team. In this way, we have attempted to advance our knowledge of *when* and *how* RLMX plays a role in work teams.

In addition, although social comparison is regarded as an inevitable element in social life, research that integrates social comparison with organizational phenomena is lacking (Greenberg et al., 2007). Thus, along with contributions to leadership and team literature, our study expands our understanding of social comparison processes within team contexts. Our findings suggest that within team contexts, team–member relationships with the common leader can become a salient comparison referent for members in the formation of their self-efficacy beliefs; however, this influence needs to be interpreted with caution. Team identification and team supportive behaviors serve as boundary conditions when explaining the effects of RLMX on self-evaluation and individual outcomes. For individuals who strongly identify with their teams, RLMX is not as meaningful for shaping their self-efficacy beliefs as it is for those who identify less with their teams. A likely explanation for this effect is that, when working within a team where members are recognized, valued, respected, and backed-up by each other, individual members are less concerned with the resources provided by the leader and the effects of RLMX on self-efficacy are attenuated.

Strengths, Limitations, and Future Research

Several methodological strengths increase confidence in the results. First, acquiring information from two sources (i.e., individual members and team leaders) reduced common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Second, integrating the polynomial regression technique (Edwards, 1994; Edwards & Parry, 1993) with HLM precisely accounted for the effects of the two components of RLMX (i.e., LMX and TLMX) on individual outcomes. Furthermore, using an integrated moderated mediation approach (Edwards & Lambert, 2007; Preacher, Curran, & Bauer, 2006) enabled us better understand the overall mechanism of how and when RLMX impacts individual effectiveness. Third, we studied "real" team contexts, which are characterized by common goals, interdependent work, stable membership, and a common leader (Hackman, 2002). We assessed the interdependent nature of teams, which is important for generating frequent interactions and communications among team members. This enabled us to control for task interdependence, thus helping us to better identify the unique contribution of RLMX on individual outcomes within team contexts.

Despite these strengths, the cross-sectional design precludes any conclusions about the causal ordering of the variables in the model. For

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instance, it is possible for members who have performed better to gain a better LMX standing within the team compared with others. Thus, further research is needed to examine how these relationships unfold over time using longitudinal or experimental research designs. Second, because LMX, team supportive behavior, team identification, and job satisfaction were assessed via self-report, the significant relationships found are not immune to inflation due to common method bias. However, the operationalization of team supportive behavior involved aggregating individual member evaluations to the team level, thereby mitigating this inflation. Third, our focus is on traditional teams, so the results of this investigation are likely to be applied to teams with a certain level of uniform interdependence and face-to-face interactions. However, the generalizability of the findings to other forms of teams and groups needs to be considered with caution. For instance, teams may have different patterns of interdependence (Wageman, 1995), and not all teams have a high level of *uniform* interdependence. For large teams with different subgroups and higher levels of interdependence within subgroups than within the whole team (Carton & Cummings, 2012), individual members' comparison point of their RLMX standings may not necessarily be the *average* of the whole team as we described here for traditional teams. Another example is virtual teams where members are geographically dispersed and the chance for engaging in face-to-face communications is lower than traditional teams (Kirkman, Rosen, Tesluk, & Gibson, 2004; Maznevski & Chudoba, 2000). It is likely that the process of leader–follower relationship building is different (Hambley, O'Neill, & Kline, 2007), and RLMX may not be as salient as it is in traditional teams. Thus, it is worth exploring the extent to which RLMX matters and how and when RLMX would take a place in other team settings, where the interaction channels are different.

One promising direction for future research is to further dissect the puzzle of determining the contexts in which RLMX influences individuals' engagement in social comparison processes that ultimately affect individual attitudinal and behavioral outcomes. Given that the central premise of LMX theory is that leaders differentiate among their members (Liden et al., 2006), substantial variance in the relative standings of LMX seems to be a fact within teams. Future studies may continue investigating the relative salience of social comparative evaluations from RLMX standing on individual attitudes and behaviors within different contexts. We fully expect that there are other aspects of the team context, such as team design characteristics, cultural values, and individual differences, that act to alter social comparison effects. For instance, RLMX may be more salient to some members than others. For example, extroverts may find it relatively easy to seek support from individuals other than the immediate leader, making RLMX less important to them than to introverts who may

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experience negative work outcomes in low RLMX relationships (cf. Bauer, Erdogan, Liden, & Wayne, 2006). It is also likely that individuals who view the immediate leader as being relatively unimportant compared to other aspects of the work environment may be relatively less influenced by RLMX (Kerr & Jermier, 1978). Finally, there may be cultural factors that influence the way individuals react to RLMX status. For example, collectivists, due to their overriding concern for the team, may not be as concerned about their own RLMX as would individualists (Dulebohn et al., in press).

Another interesting step for future researchers to take is to explore other mediating mechanisms that link RLMX to individual outcomes. Our study emphasized the importance of individual self-efficacy as a bridge that relates RLMX to individual outcomes. As previous studies have found other mediators of this relationship, such as psychological contract fulfillment (Henderson et al., 2008) and LMX social comparison (Vidyarthi et al., 2010), future research is recommended to refine our explanation of how RLMX impacts individual effectiveness. For instance, emotions and moods are closely related to the social comparison process (Greenberg et al., 2007). It may be intriguing to explore the emotions that surface based on RLMX. In addition, other outcomes resulting from RLMX should be considered. This study focused on outcomes at the individual level (e.g., in-role performance, OCB, and job satisfaction). However, individual members may react to their teams and their organization when receiving the social comparative evaluations based on RLMX standing. For instance, low RLMX standing may cause members to think of leaving the leader, the team, or even the organization. It also may be informative to explore factors that might prevent low RLMX members from quitting. For example, it has been found that LMX differentiation does not lead to team members' withdrawal behaviors from the team when there is a strong justice climate (Erdogan & Bauer, 2010). These results suggest that LMX differentiation, and corresponding RLMX, is accepted by group members when they believe that the differential treatment is fair. Further exploring the relationships between RLMX and other outcomes, as well as the potential moderating elements in team contexts, offers great potential for further theory development.

A third future research avenue is to further examine the nature of the social comparison process in terms of LMX relationships. In line with the previous research and given our research question on the relative standings of LMX in the work team, we focused on the comparison between one's own LMX and the LMX of the average teammates. However, this is not to say there is no other possible comparison referent for individual members to compare their LMX. It is possible that within work groups where interdependence is not the key characteristic (Wageman, 2001), individual

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employees may not have access to the information of all colleagues, and thus they may be able to compare with some but not all of their colleagues in the same group. Thus, it appears to be potentially valuable to adopt a social network approach to determine who is the most salient referent for social comparison of LMX relationships within work groups (Shah, 1998). As Goodman and Haisley (2007) indicated in their review, the existing literature pays little attention to the question regarding what kinds of referents should be selected in the organizational context and why. Thus, more research on the selection of different referents in the social comparison of LMX is encouraged.

Practical Implications

On a practical level, this investigation has shown that individual members are concerned with their relative LMX standing within the team, which influences their self-efficacy and subsequent performance outcomes and job satisfaction. This may not be easily avoided because leaders are not likely to treat every member equally due to role differentiation that occurs in nearly all teams (Liden et al., 2006). Findings from this study provide valuable suggestions for leaders in managing their teams. Although differentiated treatment from leaders may hurt the self-confidence of those with low RLMX standing, supportive behaviors from teammates and a strong sense of identification with their teams help to reduce the salience of RLMX with respect to its effect on self-efficacy. Leadership activities, such as emphasizing the common purpose within teams, fostering a strong team membership, and encouraging a helping and supportive climate, can help leaders to deal with the limitations associated with differentiated treatment within teams and guide team members to be confident, satisfied, and well-performing. Other management interventions, such as team training programs with an emphasis on fostering effective cooperation and coordination, and job rotation practice to increase the familiarity and understanding among team members regarding each other's work, may also serve to improve team members' self-efficacy beliefs.

Conclusion

In conclusion, this study integrates and extends the theories of social comparison and LMX by providing a comprehensive picture of how and when RLMX is influential in building individual attitude (i.e., job satisfaction) and behaviors (i.e., in-role performance and OCB). The results highlight the critical role of team identification and team supportive behavior in shaping self-efficacy beliefs and subsequent individual effectiveness.

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