Supervisors’ Upward Exchange Relationships and Subordinate Outcomes: Testing the Multilevel Mediation Role of Empowerment

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This study empirically examined the proposition that supervisors’ exchange relationships with their own supervisors (i.e., leader–leader exchange, or LLX) are related to their subordinates’ work-related outcomes through 3 mechanisms: (a) leaders modeling their LLX to develop and maintain their exchange relationships with their subordinates (i.e., leader–member exchange, or LMX), (b) motivating the team and its members, captured by team and individual empowerment, and (c) facilitating the relationships between LMX and individual outcomes. Analyses of multisource and lagged data from 104 team supervisors and 577 subordinates showed that LMX mediated the positive relationship of LLX on subordinates’ individual empowerment. Furthermore, team empowerment and individual empowerment sequentially mediated the positive relationships between LLX and subordinates’ job satisfaction and job performance. The authors also found that the indirect relationships of LMX with job satisfaction and job performance via individual empowerment were stronger when LLX was higher. Theoretical and practical implications of these findings are discussed.

Keywords: LMX, empowerment, LLX

The quality of relationship between a supervisor–subordinate dyad, termed leader–member exchange (LMX; Diestesch & Liden, 1986), has been shown to be positively related to important subordinates’ work-related outcomes, including job satisfaction, job performance, and citizenship behaviors (e.g., Gerstner & Day, 1997; Ilies, Nairgang, & Morgeson, 2007; Zhang, Wang, & Shi, in press). Recent research has extended the historical individual-level emphasis in the LMX literature by considering LMX from a multilevel perspective. For example, Erdogan and Bauer (2010) showed that the level of LMX differentiation in groups was negatively related to subordinates’ work attitudes and behaviors when justice climate was low. Furthermore, the average level of LMX in teams negatively related to team conflict (Boies & Howell, 2006) and attenuated the negative influence of diversity on turnover (Nishii & Mayer, 2009). Recent research has also begun to connect LMX to other relational constructs in the organizational context, such as supervisors’ upward exchange relationships with their own supervisors, or leader–leader exchange (i.e., LLX; Tangirala, Green, & Ramanujam, 2007; Venkataramani, Green, & Schleicher, 2010).

These recent studies on LMX share a common observation that rather than operating as a separate exchange system, the dyadic exchange relationship between supervisors and subordinates exists in a broader network of exchange relationships in the organization (Graen, Cashman, Ginsburg, & Schiemann, 1977; Graen & Uhl-Bien, 1995). In particular, supervisors develop a pattern of social exchanges with the subordinates in their work groups (i.e., LMX) as well as with their own supervisors (i.e., LLX). Thus, the exchange relationships between focal supervisor–subordinate dyads as well as other social exchanges within the team are nested within the exchange relationship between the supervisor–higher level supervisor dyad. In this article, we argue that it is important to understand the relationships between LLX and subordinates’ outcomes, because LLX captures an important linkage between the organizational context and employees and their work teams. According to Johns (2006), organizational context refers to opportunities or constraints embedded in the organization that exert nontrivial influences on employee motivation and behavior. Prior leadership research has suggested that midlevel supervisors, such as work team leaders, hold “linking pin positions” (i.e., positions that link between two or more hierarchically nested organizational subunits; Likert, 1961), which allow them greater access to opportunities and resources within the organizational context. Furthermore, leadership research has suggested that, through their relationships with leaders at higher organizational levels (i.e., their LLX), midlevel supervisors can secure better organizational opportunities.
and resources for their own subunits (e.g., Graen et al., 1977; Tangirala et al., 2007). However, despite initial research on LLX, which has linked LLX to employee outcomes such as job satisfaction and organizational commitment (e.g., Tangirala et al., 2007; Venkataramani et al., 2010), we know rather little about the mechanisms through which LLX can promote important team- and employee-level outcomes.

Accordingly, building on and extending previous LMX and LLX research, we proposed and examined in the present study three potential mechanisms to explicate the effects of LLX on subordinates and their work teams. First, we proposed that, through social learning processes, supervisors learn from their own exchange experience with their supervisors, such that the quality of relationships leaders develop with their members (i.e., LMX) mimics the quality of relationships leaders develop with their superiors (i.e., LLX). Second, at the team level, we argue that LLX promotes team motivation. Specifically, leaders who have higher quality LLX are more likely to empower and hence motivate teams and their members (cf. Chen, Kirkman, Kanfer, Allen, & Rosen, 2007). Third, LLX may also have a moderating influence on individual-level relationships between LMX and employee-level outcomes. In particular, we argue that supervisors who have higher quality LLX can obtain more valuable resources from their supervisors, which can facilitate the benefits of higher quality LMX, as reflected by improved subordinates’ job attitudes and behaviors. To capture these three mechanisms, we delineate a multilevel model linking LLX to individual-level outcomes (job satisfaction and job performance) through LMX, team empowerment, and individual empowerment (see Figure 1).

We examined the mediating role of individual and team empowerment in the relationships between LLX and subordinates’ job attitudes and performance for two reasons. First, theories and empirical research suggest that motivational beliefs—including those captured by empowerment—play critical roles in linking leadership constructs such as LMX to subordinates’ work attitudes and behaviors (e.g., Chen & Kanfer, 2006; Chen et al., 2007; Kirkman & Rosen, 1999; Liden, Wayne, & Sparrowe, 2000; Spreitzer, 1995). In particular, at both the individual and team levels, empowerment captures the extent to which team members believe they have autonomy as well as competence to perform meaningful tasks that can impact important organizational outcomes (Chen et al., 2007; Kirkman & Rosen, 1999; Spreitzer, 1995), which motivate team members to personally and collectively pursue task goals successfully and persist in an effort to accomplish their goals (Chen & Kanfer, 2006). Second, the multilevel nature of the empowerment construct allows for conceptualization and examination of how leaders with more positive LLX marshal resources from the broader organizational context to influence subordinates through both team-level and individual-level processes. Specifically, integrating Chen and Kanfer’s (2006) theory of team motivation with LMX theory, we propose below that team empowerment may explain how LLX captures processes that empower (and therefore motivate) the team as a whole; in contrast, individual empowerment capture processes through which team leaders—by developing relationships with individual team members—empower (and hence motivate) individual members personally.

Our aim was to make several contributions to the extant research. Theoretically, examining the proposed model in Figure 1 can help broaden researchers’ understanding of the complex, multilevel mechanisms through which LLX relates to important subordinate-level outcomes. This extends previous LLX and LMX research (Tangirala et al., 2007; Venkataramani et al., 2010) by considering team- and individual-level motivational mechanisms through which LLX promotes employee-level outcomes. In addition, by examining the mediating roles of empowerment across the individual and team levels, our study provides an important integration between multilevel theories of leadership, teams, and motivation. Importantly, although our model builds on some linkages that have been previously established, the integration among these linkages provides an important extension of prior work. In particular, this integration allows for better understanding of the critical role team leaders play in linking their teams to the broader organizational context within which their teams operate (cf. Ilgen, 1999).

Empirically, by examining subordinates’ job satisfaction and job performance, the present study also provides an important test for the proposition that high-quality exchange relationships between supervisors and upper level management teams can cascade downward in the organizational hierarchy to ultimately benefit impor-

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**Figure 1.** Hypothetical model. All the hypothesized relationships are positive. H1, H2a, H2b, H3, H4a, and H4b represent indirect effects. H5 represents the cross-level moderation effect. H6a and H6b represent cross-level moderated mediation effects. H = Hypothesis.
tant work-related outcomes of their subordinates (Graen et al., 1977). Moreover, we also provide a more rigorous empirical examination of relationships involving LLX in the present study, relative to prior work, by using a time-lagged design and collecting data from multiple sources, as well as offering a constructive replication of prior findings from LMX, LLX, and empowerment research (e.g., Chen et al., 2007; Tangirala et al., 2007) in a sample of supervisors and followers in China.

The Nature of LLX

Like LMX, LLX has been conceptualized as a relationship-based construct, which develops through a series of recurring interpersonal exchanges between supervisors and their own supervisors (Tangirala et al., 2007). According to Cropanzano and Mitchell (2005), once such relationship is developed, it becomes relatively stable and dictates the quality of social exchanges between supervisors and their supervisors. Similar to LMX (Dienesch & Liden, 1986; Liden & Graen, 1980), the quality of LLX is typically characterized by the levels of mutual trust, respect, obligation, and goal commonality shared between supervisors and their supervisors. When supervisors have high-quality LLX with their own supervisors, their supervisors are more likely to trust and respect them and feel a sense of obligation to help and facilitate their further development (Graen et al., 1977; Graen & Uhl-Bien, 1995). Therefore, it is conceivable that the quality of LLX is related to the amount of resources that the upper level management team is willing to bestow to supervisors in the linking-pin positions.

Foas and Foase’s (1974, 1980) resource theory argued that there are six types of resources exchanged in social interactions, that is, information, goods, services, money, status, and love. Cropanzano and Mitchell (2005) argued that these six types of resources can be further collapsed into two categories when studying workplace relationships: economic/material and socioemotional resources. Economic/material resources are usually tangible and satisfy financial needs (e.g., money and goods). Socioemotional resources, such as status, recognition, or coaching, satisfy social and emotional needs (e.g., self-worth) and are usually symbolic and particular (e.g., the value of status depends on who acknowledges the status, and its’ worth is difficult to measure objectively). In line with LMX theory, previous empirical research (Ilies et al., 2007; Wayne, Shore, & Liden, 1997) has suggested that in low-quality exchange relationships, the resources bestowed by the leaders to the followers are typically economic/material and are often bounded by the specific employment contract. However, in high-quality exchange relationships, the resources bestowed by the leaders often go beyond what is specified in the employment contract (Ilies et al., 2007; Wayne et al., 1997) and also include socioemotional resources, such as status-elevating recognition that satisfies self-esteem needs (Anand, Vidyarthi, Liden, & Rousseau, 2010; Zhang et al., in press). Studies showed that the quality of LMX is positively related to subordinates’ visibility and influence within organization (Spawrowe & Liden, 2005), the amount of material benefits given to the subordinates (e.g., salary; Scandura & Schriesheim, 1994), subordinates’ participation in decision making (Vecchio & Brazil, 2007), and more successfully negotiated idiosyncratic deals (Hornung, Rousseau, Glaser, Angerer, & Weigl, 2010).

Considering that similar to LMX, LLX is also a relationship-based construct that dictates ongoing social exchanges between supervisors and their own supervisors, we argue that the quality of LLX is related to the amount and types of resources that supervisors receive from their own supervisors. Specifically, building on research cited above, supervisors in high-quality LLX likely receive more economic/material and socioemotional resources from the upper level management team that go beyond the formal employment contract, as compared with supervisors in low-quality LLX. As noted by Tangirala et al. (2007), supervisors with higher LLX “are better positioned to seek and receive psychological resources (e.g., emotional support, enhanced status at work, recognition) and material resources (e.g., increased budgetary support, decision-making authority) from their supervisors” (p. 311). As we explain further below, LMX along with individual and team empowerment likely capture key mechanisms through which team leaders with higher LLX use psychological and material resources to promote positive performance and attitudinal outcomes in their teams.

Individual and Team Empowerment

Individual (or psychological) empowerment has been conceptualized as a multidimensional construct that captures four correlated motivational beliefs, including impact, competence, meaningfulness, and choice (Spreitzer, 1995; Thomas & Velthouse, 1990). Impact describes individuals’ belief that their performance on work tasks can influence outcomes in the organization; competence is the individuals’ evaluation of their capabilities to perform work tasks; meaningfulness captures individuals’ intrinsic concern or caring for the work task; and choice describes individuals’ belief they have autonomy to decide how best to perform work tasks. Although the dimensions of empowerment have distinctive theoretical meanings, they are conceptually related and collectively form a motivational force that guides and energizes work behavior (Spreitzer, 1995; Thomas & Velthouse, 1990). Empirically, a meta-analysis by Seibert, Wang, and Courtright (2011) found that the four empowerment dimensions were positively correlated and related similarly and positively to work-related outcomes, such as job satisfaction and job performance. Furthermore, Seibert et al. (2011) found that the overall empowerment variable related to outcomes more strongly than each empowerment dimension separately. In line with these findings, researchers have often examined individual empowerment as a single composite of the four dimensions (e.g., Chen et al., 2007; Spreitzer, 1995; Zhang & Bartol, 2010).

At the team level, researchers have conceptualized team empowerment as an isomorphic construct to individual empowerment, in that it captures a shared cognition among team members regarding the extent to which their team as a whole has autonomy as well as competence to perform meaningful tasks that can impact important organizational outcomes (Kirkman & Rosen, 1999). Chen and Kanfer’s (2006) theory of team motivation has proposed that team empowerment emerges from individually held beliefs regarding team to shared team-level beliefs, owing to common interactions among members as well as exposure to similar inputs (e.g., prior team performance or team leader behaviors) that impact
team motivational beliefs (cf. Kozlowski & Klein, 2000). Chen and Kanfer (2006) have proposed further that, similarly to individual empowerment, team empowerment exerts positive motivational influences on the team as a whole by directing and energizing collective behavior in pursuit of team goals. Indeed, there is empirical evidence that empowerment exerts homologous—or functionally similar—relationships with outcomes such as performance at the individual and team levels of analysis (Chen et al., 2007; Seibert et al., 2011). In addition, although individual empowerment and team empowerment are distinct, in that they reside at different levels of analysis, the two constructs have been found to be positively related (Chen et al., 2007).

Chen and Kanfer’s (2006) theory posits further that ambient inputs, which pervade the team as a whole (cf. Hackman, 1992), are likely to exert more immediate and direct influences on team than individual empowerment; in contrast, discretionary inputs, which can be differentially directed at individual team members (cf. Hackman, 1992), are likely to exert more immediate and direct influences on individual than team empowerment. For example, Chen et al. (2007) found that empowering leadership climate—a team-level ambient input—more strongly related to team than individual empowerment; in contrast, the personal relationships team leaders developed with individual members (i.e., LMX—a form of discretionary input) more strongly related to individual than team empowerment. Interestingly, in Chen et al.’s (2007) study, LMX was also found to mediate between team-level leadership and individual empowerment, suggesting that ambient inputs also indirectly promote individual-level empowerment.

Thus, empowerment theory (Spreitzer, 1995; Thomas & Velthouse, 1990), along with Chen and Kanfer’s (2006) theory of team motivation, provides a framework for explaining the mechanisms through which LLX promotes team and individual outcomes. In particular, in line with Chen and Kanfer, we propose that LLX is a type of team-level (ambient) input, capturing the extent to which teams (through their common team leader) collectively gain access to organizational resources; in contrast, LMX is an individual-level (discretionary) input, capturing the extent to which team leaders may differentially use or allocate resources vis-a-vis different team members. In turn, as we explain more fully below, LLX and LMX combine to empower, and hence motivate, the team as a whole as well as members personally, which in turn lead to higher levels of team members performance and satisfaction. With this theoretical framework as a guide, we next delineate three distinct yet related mechanisms through which LLX promotes outcomes in teams.

Leaders Modeling Their LLX to Develop and Maintain Their LMX

Supervisors’ upward exchange relationship can be positively related to their LMX with subordinates through several possible processes including the social learning process. Research on cascading or “trickle-down” leadership effects has suggested that supervisors learn leadership styles from their own supervisors through a role-modeling or social learning process (e.g., Bass, 1990; Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009). Specifically, it is argued that leadership styles can cascade from one supervisory level to a lower level because higher level supervisors serve as role models for the lower level supervisors; thus, lower level supervisors mimic and learn leadership behaviors from higher level supervisors. For example, Mayer et al. (2009) showed that ethical leadership exhibited by higher level managers is positively related to the extent to which lower level managers engaged in ethical leadership. Furthermore, Zohar and Luria (2005) found that safety-related managerial commitments and priorities at higher management levels were positively related to the same variables among lower level supervisors. Therefore, it is conceivable that supervisors as followers in their upward exchange relationship may observe and mimic the behaviors of their supervisors, including the way they interact with their subordinates in their relationship development process.

Supervisors can mimic their own supervisors for several possible reasons. Supervisors can observe their own supervisors, who are a legitimate source for information about appropriate behavior in the organization, to learn the valued ways to lead their subordinates. In addition, supervisors’ own supervisors have power over decisions about their rewards and promotions. Therefore, supervisors are likely to mimic their supervisors to signal that they behave in a similar way. Considering that building relationship is an important leadership function, it is conceivable that supervisors may model their supervisors’ behaviors in relationship building. In developing LMX, building mutual trust and respect and negotiating roles and obligations with their subordinates are part of supervisors’ leadership behaviors. Supervisors can observe and mimic their own supervisors’ behaviors that were displayed in developing LLX to learn the appropriate and expected behaviors for developing LMX. Thus, LLX may be positively related to LMX developed by the supervisors with their subordinates. In fact, LMX theory has suggested that through a leadership-making process, leaders can be trained to develop high-quality LMX with more than a select few subordinates (Graen & Uhl-Bien, 1995). In support, empirical results from Cashman, Dansereau, Graen, and Haga (1976) and Graen et al. (1977) suggested that the quality of LMX was positively associated with subordinates’ relationships with their supervisors. It should be noted that it is possible that LMX may precede LLX in certain situations (e.g., when the supervisor’s supervisor is new to the managerial position). However, consistent with prior theory and findings on the effect of LLX on LMX (e.g., Venkataramani et al., 2010), the present model hypothesizes that LLX relates to LMX (a top-down process) instead of LLX emerging from LMX (a bottom-up process). This hypothesis mainly draws on multilevel organizational theories (Kozlowski & Klein, 2000), which argue that top-down processes play a more dominant role than bottom-up processes in matured organizations, because higher level phenomena tend to be more stable and difficult to modify relative to parallel lower level phenomena. Thus, it is more likely for LLX, which is conceptualized as a contextual factor of lower level leadership process, to have an effect on the leader–subordinate relationship than the reverse.

Past research has suggested further that LMX could promote subordinates’ individual sense of empowerment through social exchange processes, thereby enhancing subordinates’ work-related satisfaction and performance (e.g., Chen et al., 2007; Liden et al., 2000). For dyads with high-quality LMX, supervisors typically provide more valuable resources to subordinates, such as information, autonomy, decision latitude, and social support (Graen & Uhl-Bien, 1995; Vecchio & Brazil, 2007), which likely lead subordinates to have a greater sense of impact and autonomy (Tangirala et al., 2007). In addition, by receiving more information and
personal support and coaching, employees with higher quality LMX are likely to develop a more positive sense of competence and to care more about their work tasks. Thus, high-quality LMX may increase subordinates’ sense of personal empowerment, which in turn motivates them to perform better and hold more positive attitudes toward their jobs (Chen & Kanfer, 2006).

Previous theory and empirical research have supported the positive relationships between individual empowerment and employees’ job attitudes and job performance (for a meta-analytic review, see Seibert et al., 2011). According to motivation theories, employees’ sense of empowerment relates to their performance goals, task activity level, initiative taking, persistence, and flexibility (Chen & Kanfer, 2006; Thomas & Velthouse, 1990). Moreover, individual empowerment is also related to subordinates’ attitudes toward their jobs (Liden et al., 2000), as individuals who are more empowered may find their jobs to be more fulfilling and satisfying. Empirical research also found that LMX was positively related to individual empowerment, which mediated the positive relationship between LMX and job performance and job satisfaction (Chen et al., 2007; Liden et al., 2000). We therefore propose that LMX captures an important mechanism through which LLX positively relates to individual empowerment and subsequently to employee-level job performance and job satisfaction. Hence:

Hypothesis 1: LMX mediates the positive relationship between LLX and individual empowerment.

Hypothesis 2a: LMX and individual empowerment sequentially mediate the positive relationship between LLX and subordinates’ job satisfaction (i.e., LLX → LMX → individual empowerment → job satisfaction).

Hypothesis 2b: LMX and individual empowerment sequentially mediate the positive relationship between LLX and subordinates’ job performance (i.e., LLX → LMX → individual empowerment → job performance).

LLX Promotes Team Motivation

On the basis of Chen and Kanfer’s (2006) team motivation theory, we expect the relationship between LLX and team empowerment to be homologous to the relationship between LMX and individual empowerment. First, higher quality LLX may lead upper level management to bestow higher social status to supervisors (Foa & Foa, 1974, 1980). According to Duchon, Green, and Taber (1986) and Venkataramani et al. (2010), a team leader’s social status in the organization is highly visible to his or her team members. In support, Venkataramani et al. (2010) found that supervisor-rated LLX was significantly related to the supervisor’s perceived status, as rated by the supervisors’ subordinates. As such, the high status associated with a team leader’s higher quality LLX may lead team members to feel their leader can represent their team effectively in the organization, and hence to share the belief their team can have a strong impact in the organization (e.g., Brass, 1984; Brass & Burkhardt, 1993; Morgeson, DeRue, & Karam, 2010). The greater status associated with team leaders’ higher levels of LLX may also lead the team as a whole to have greater autonomy in deciding how and when to carry out their tasks.

In addition, LLX can also enable supervisors to carry out team leadership functions by providing resources relevant for specific types of leadership activities that are positively related to team empowerment (Chen et al., 2007). For example, supervisors with higher quality LLX are more likely to receive more material and social support in their work (Tangirala et al., 2007), which in turn lead team members to feel they are more capable at carrying out their tasks, even when facing difficulties and challenges. Furthermore, the higher visibility and support associated with higher levels of LLX may also signal to members that their team performs meaningful tasks in the organization. In summary, because LLX can promote all four dimensions of team empowerment, we expect that higher LLX quality would be associated with a higher shared sense of team empowerment among team members.

Considering that theoretical and empirical research has suggested that team empowerment and individual empowerment are positively related (e.g., Chen & Kanfer, 2006; Chen et al., 2007), we also expect that team empowerment, which increases as the quality of LLX increases, would mediate the relationship between LLX and individual empowerment. This is consistent with Chen and Kanfer’s (2006) theory that team empowerment mediates between ambient (team-oriented) inputs such as leadership and individual-level empowerment. In addition, team members who perceive their leaders to be in a higher quality LLX are more likely to perceive their teams to be empowered, which in turn may also make them to feel more empowered as individuals. Indeed, Chen et al. (2007) found that team empowerment positively related to individual empowerment and, furthermore, mediated between leadership behaviors and individual empowerment. Therefore:

Hypothesis 3: Team empowerment mediates the positive relationship between LLX and individual empowerment.

We also expect the relationship between LLX and individual empowerment via team empowerment to further promote subordinates’ job satisfaction and job performance. Specifically, when a leader has a higher quality upward exchange relationship, the whole team is more likely to be empowered due to having higher levels of resources they may need to perform team tasks. This collective sense of team empowerment enhances individuals’ personal sense of empowerment, which, as noted earlier, is positively associated with individuals’ job performance and job satisfaction. Thus:

Hypothesis 4a: Team empowerment and individual empowerment sequentially mediate the positive relationship between LLX and subordinates’ job satisfaction (i.e., LLX → team empowerment → individual empowerment → job satisfaction).

We also examined additional data from a sample with 29 supervisors and 123 subordinates to confirm that LLX is visible to subordinates. Participants in this sample were recruited from research and development teams of a bank in China; therefore, it is comparable to the sample reported in this article. The correlation between subordinates’ perceived LLX and LLX report by the supervisors was positive and significant ($r = .21, p < .05$), supporting the argument that LLX is visible to subordinates.
Hypothesis 4b: Team empowerment and individual empowerment sequentially mediate the positive relationship between LLX and subordinates' job performance (i.e., LLX $\rightarrow$ team empowerment $\rightarrow$ individual empowerment $\rightarrow$ job performance).

**LLX Facilitates the Effectiveness of LMX**

We propose further that a third mechanism through which LLX relates to employee outcomes is by facilitating the individual-level relationship between LMX and employee outcomes. On the basis of social exchange theory (Cropanzano & Mitchell, 2005), relationship per se does not equal to the resources actually exchanged within the relationship or their effects on subordinates' motivation. For LMX of the same quality, the influence of LMX on subordinates may vary depending on the amount of resources that can be bestowed by the supervisor to the subordinate, which may depend on LLX. In other words, assuming all else equal, more resources from LLX will serve to strengthen LMX–outcomes relationships. As noted earlier, the higher quality of LLX between the supervisor and his or her own supervisor likely leads the supervisor to possess greater status, autonomy, or financial resources (Tangirala et al., 2007). Hence, LLX may enable supervisors to have greater capability to selectively motivate and support employees within their teams, with whom they have higher quality LMX (cf. Graen et al., 1977). For example, for a supervisor to elevate subordinates' status, that supervisor needs to enjoy higher formal or informal status in the organizations as well.

Thus, supervisors with high-quality LLX may have access to more valuable resources, which in turn they can distribute to their subordinates. Consequently, subordinates of supervisors who have more resources from upward exchange relationships may be more likely to benefit from the high-quality LMX relationships they form with supervisors than subordinates of supervisors who have poorer quality LLX. In other words, LLX may serve to enhance the positive relationship between LMX and subordinates' sense of empowerment. As a result, the indirect relationships between LMX and job satisfaction and job performance via individual empowerment are expected to be conditioned on LLX as well. Hence:

**Hypothesis 5:** LLX moderates the positive relationship between LMX and individual empowerment such that the relationship becomes stronger as LLX is higher.

**Hypothesis 6a:** The indirect relationship between LMX and job satisfaction via individual empowerment is moderated by LLX such that the indirect relationship becomes stronger as LLX is higher.

**Hypothesis 6b:** The indirect relationship between LMX and job performance via individual empowerment is moderated by LLX such that the indirect relationship becomes stronger as LLX is higher.

**Method**

**Sample and Procedure**

Employees working for a large bank in China were recruited to participate in the present study. The employees worked in research and development teams, which performed tasks such as developing new customer service tools and solving problems in electronic banking systems. There was one supervisor (or a team leader) for each team. Team members interacted with each other in everyday job tasks, such as task collaboration and discussion in project meetings. Research and development teams were studied because the team members must be interdependent in order to successfully accomplish their tasks. Therefore, both team- and individual-level empowerment were relevant for their job performance and job attitudes. In addition, supervisors of the research and development teams in the bank were subordinates of an upper level management team. Therefore, supervisors were the linking-pins between their subordinates and the bank’s upper level management team.

Surveys were distributed to all 104 supervisors of the bank’s research and development teams and all of their 610 subordinates. Before the surveys were distributed, these employees received a letter from their human resources department that solicited their voluntary participation, which assured them that their managers and organization would not know their individual responses in the survey. Participants were also allowed to complete the surveys during work time. As a result, all supervisors ($N = 104$) completed both self-report surveys and performance ratings for subordinates; among subordinates, 577 completed self-report surveys (response rate = 95%). The average age of the supervisors was 30.73 years ($SD = 6.88$). Among them, 54 (51.90%) were men. Average organizational tenure of the supervisors was 6.04 years ($SD = 3.67$). Among the subordinates who participated in the study, 296 (51.30%) were men. Average age of the subordinates was 26.66 years ($SD = 5.06$). Average organizational tenure of the subordinates was 2.92 years ($SD = 3.18$). Subordinates have worked for an average of 2.29 years ($SD = 2.08$) in the current teams. Team size ranged from three to 14 members per team ($Mdn = 5$).

Data were collected at two time points with 3 months in between to warrant sufficient time lag to separate the measurement of predictors and mediators from the outcome variables. At Time 1, supervisors completed a measure of LLX; subordinates completed measures of LMX, individual empowerment, and team empowerment; and both supervisors and subordinates also provided demographic information. At Time 2, supervisors rated the job performance of each of their subordinates, and subordinates completed a job satisfaction measure. All surveys were translated from English to Chinese, using Brislin’s (1980) recommended translation-back-translation procedure. Unless otherwise noted, a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) was used in the measures.

**Measures**

**LMX and LLX.** Supervisors’ LLX and subordinates’ LMX were both measured by the eight-item scale of LMX used by Bauer and Green (1996) (e.g., “I usually know where I stand with my supervisor”). This version of the scale was formed by decomposing one double-barrel item of the original seven-item scale developed by Scandura and Graen (1984). Cronbach’s alpha was .92 and .90 for LMX and LLX, respectively.

**Individual empowerment and team empowerment.** Individual empowerment was measured by the 12-item scale developed by Spreitzer (1995; e.g., “I am confident about my ability to do my job”), whereas team empowerment was measured by the
12-item scale developed by Kirkman, Rosen, Tesluk, and Gibson (2004; e.g., “My team believes it can be very productive”). Following previous studies (e.g., Chen et al., 2007; Kirkman & Rosen, 1999), overall scores were calculated, respectively, for individual and team empowerment scales by averaging the item scores. Cronbach’s alpha was .86 and .96 for individual and team empowerment, respectively.

**Job satisfaction.** Subordinates’ job satisfaction was measured by the eight-item Abbreviated Job in General scale (Russell et al., 2004). Participants were asked to think of their job in general and rate how the adjectives (e.g., pleasant) or phrases (e.g., “makes me content”) described their job by choosing from “Yes,” “No,” and “Uncertain.” Following Russell et al. (2004), these three response options were scored as 3, 0, and 1, respectively, for data analysis. Cronbach’s alpha was .81 for this scale.

**Job performance.** Supervisors rated subordinates’ job performance using five items used by Podsakoff and MacKenzie (1989) and Janssen and Van Yperen (2004) (e.g., “This subordinate always accomplishes his/her in-role assignments”; 1 = strongly disagree, 5 = strongly agree). Cronbach’s alpha was .87 for this scale.

**Control variables.** Subordinates’ gender and time for which they had worked in the team (i.e., team tenure) were used as control variables in the analyses. The effect of gender was controlled because previous studies suggested that male and female employees might differ in their individual empowerment (e.g., Zhang & Bartol, 2010), job satisfaction (e.g., Kim, 2005), and job performance (e.g., Janssen & Van Yperen, 2004). Team tenure was controlled because subordinates’ experience in the team might influence their job performance (McDaniel, Schmidt, & Hunter, 1988). Age and organizational tenure were not included as control variables because they were highly correlated with team tenure ($r_s = .50$ and .74, $p_s < .01$, respectively). The effect of team size on team-level variable (i.e., team empowerment) and individual-level variables (i.e., LMX, individual empowerment, job satisfaction, and job performance) was also controlled for.

**Confirmatory Factor Analyses**

Confirmatory factor analyses were conducted to examine whether subordinates’ scores on their self-report measures (i.e., LMX, individual empowerment, team empowerment, and job satisfaction) captured distinctive constructs. Following previous research (Chen et al., 2007), scores on the four dimensions of the individual empowerment and team empowerment measures were used as indicators for these two latent variables. The hypothesized four-factor model was specified by loading indicators on their respective latent variables, and the correlations among latent variables were freely estimated. Results showed that the four-factor model fit the data well, $\chi^2(246, N = 577) = 658.51$, comparative fit index (CFI) = .95, standardized root-mean-square residual (SRMR) = .05, and root-mean-square error of approximation (RMSEA) = .05. Indicators all significantly loaded on their respective latent factors. Considering that the item contents in the measures of individual and team empowerment were similar, an alternative three-factor model was specified by constraining the variances of and covariance between individual and team empowerment factors to be equal (thereby their correlation equaled 1), and constraining the covariances between these two factors and other latent factors to be equal. The three-factor model fit the data significantly worse than the four-factor model, $\Delta\chi^2(4, N = 577) = 85.39, p < .01$. An alternative two-factor model was specified by constraining constructs measured at Time 1 to have equal variances and covariances with each other (i.e., LMX, individual empowerment, and team empowerment perfectly correlated with each other) and equal covariances with the satisfaction factor. This two-factor model also fit the data significantly worse than the four-factor model, $\Delta\chi^2(7, N = 577) = 1050.29, p < .01$. Therefore, measures reported by subordinates captured distinctive constructs.

**Aggregation Tests**

Scores of team empowerment were aggregated from individual ratings to the team level. In support of aggregation, the median $r_{wgj}$ across the teams was .98, ranging from .74 to 1.00, indicating that in all the teams surveyed, members shared perceptions regarding team empowerment in their particular teams. Additional support for aggregating team empowerment scores to the team level was provided by interrater reliability indices (intraclass correlation (ICC)) = .30 and ICC(2) = .70). In addition, one-way analysis of variance (ANOVA) results showed that there were significant differences in team-level means of team empowerment ratings, $F(103, 473) = 3.33, p < .01$. Taken together, these lines of evidence supported the aggregation of the team empowerment ratings.

**Analytic Strategy**

The present data contained a hierarchical structure in which responses of individual-level variables were nested within teams. In addition, to test certain multilevel mediation hypotheses (i.e., Hypotheses 2a, 2b, 6a, and 6b), the covariances among the Level 1 (i.e., the individual-level) random effects had to be estimated in order to estimate random indirect effects and corresponding standard errors (Bauer, Preacher, & Gil, 2006). Therefore, multilevel modeling was used to simultaneously estimate the hypothesized multilevel relationships using Mplus 5.0 (Muthén & Muthén, 2007). The Monte Carlo method recommended by Preacher, Zyphur, and Zhang (2010) was also used to estimate confidence intervals for the hypothesized multilevel mediated relationships to determine their significance. In 41 (39.42%) teams sampled, all subordinates in the teams participated in the study, whereas in the remaining 63 (60.58%) teams, various portions of subordinates (all larger than 80%) in the teams participated in the study. Because of these unequal probabilities for team members to participate in the study, standard errors of model parameter estimates were computed using a sandwich estimator to correct the potential sampling bias (for technical details, see Muthén & Muthén, 2007).

**Results**

Means, standard deviations, and bivariate correlations among studied variables are reported in Table 1. At the individual level, LMX was positively correlated with individual empowerment ($r = \ldots$)

\footnote{An open-source software R-based simulator can be found at http://www.quantpsy.org}
Leadership exchange and job performance

To estimate the hypothesized model (see Figure 1), we specified the Level 1 LMX-individual empowerment, individual empowerment-job satisfaction, and individual empowerment-job performance slopes to be random. In addition, gender and team tenure were included as control variables with fixed effects on individual empowerment, job satisfaction, and job performance. The covariances among random effects were also estimated (Bauer et al., 2006). At Level 2 (i.e., team level), we specified the relationships of LLX and team size with team empowerment, the cross-level direct relationship between LLX and LMX, and the cross-level interaction effect between LLX and LMX on individual empowerment. Team empowerment was also specified to have a direct cross-level relationship with individual empowerment. We also estimated the relationships between team size and all individual-level variables. To facilitate the interpretation of the findings, gender, team tenure, LLX, team size, and team empowerment were all grand mean centered. LMX was group-mean centered to obtain an unbiased estimate of the cross-level interaction between LLX and LMX on individual empowerment (Enders & Tofighi, 2007; Hofmann & Gavin, 1998). Results showed that all relationships in the hypothesized model were significant (see Figure 2). We used Snijders and Bosker’s (1999) formulas to calculate pseudo-$R^2$ ($\tilde{R}^2$) for the model, reflecting the proportional reduction of Level 1 and Level 2 errors due to including predictors in the model. Predictors accounted for 22% of the total variance in job satisfaction and 4% of the total variance in job performance, suggesting that LLX, LMX, and individual and team empowerment indeed had significant roles in predicting subordinates’ job satisfaction and job performance.

**Hypotheses Tests**

**Hypothesis 1.** LMX was hypothesized to mediate the relationship between LLX and individual empowerment. In support, Figure 2 shows that LLX was positively related to LMX ($\gamma = .26$, $p < .01$) and job satisfaction ($r = .18$, $p < .01$), and individual empowerment was positively correlated with job satisfaction ($r = .26$, $p < .01$) and job performance ($r = .08$, $p < .05$). At the team level, LLX was positively correlated with team empowerment ($r = .20$, $p < .05$). These findings provided preliminary support for the hypothesized relationships.
p < .01), and LMX was positively related to individual empowerment ($\gamma = .31, p < .01$). To estimate the hypothesized cross-level indirect relationship, we used a parametric bootstrap procedure (Preacher et al., 2010). With 20,000 Monte Carlo replications, results showed that there was a positive indirect relationship between LLX and individual empowerment via LMX (indirect effect = .081, 95% bias-corrected bootstrap CI [.029, .143]). Therefore, Hypothesis 1 was supported.

**Hypotheses 2a and 2b.** LMX and individual empowerment were hypothesized to sequentially mediate the relationships between LLX and job satisfaction and job performance. Figure 2 shows that individual empowerment was positively related to job satisfaction ($\gamma = .28, p < .01$) and job performance ($\gamma = .10, p < .01$). Furthermore, with 20,000 Monte Carlo replications, we found that the indirect effect for LLX $\rightarrow$ LMX $\rightarrow$ individual empowerment $\rightarrow$ job satisfaction was 0.022, with a 95% CI of [0.007, 0.046]. We found that the indirect effect for LLX $\rightarrow$ LMX $\rightarrow$ individual empowerment $\rightarrow$ job performance was 0.008, with a 95% CI of [0.002, 0.015]. Thus, both indirect relationships were significant, supporting Hypotheses 2a and 2b, suggesting that LLX related to subordinates’ work outcomes through LMX and individual empowerment. Although the point estimates for these indirect effects seem small, Preacher and Kelley (2011) pointed out that the estimates of indirect effects are still sample statistics, which very likely differ from the population parameters and are bounded by the range of possible values of regression weight of which very likely differ from the population parameters and are bounded by the range of possible values of regression weight of each link in the mediation process. Taking these properties of indirect effect estimates into consideration, the indirect effects seem small, Preacher and Kelley (2011) pointed out that the estimates of indirect effects are still sample statistics, which very likely differ from the population parameters and are bounded by the range of possible values of regression weight of each link in the mediation process. Taking these properties of indirect effect estimates into consideration, the indirect effects found in the present study are still meaningful and important support to our theoretical hypotheses about the relationships between variables.

**Hypothesis 3.** Team empowerment was hypothesized to mediate the relationship between LLX and individual empowerment. As shown in Figure 2, LLX was positively related to team empowerment ($\beta = .14, p < .01$), and team empowerment was positively related to individual empowerment ($\gamma = .39, p < .01$). With 20,000 Monte Carlo replications using the parametric bootstrap method, results showed that there was a positive indirect relationship between LLX and individual empowerment via team empowerment (indirect effect = .053, 95% bias-corrected bootstrap CI [.043, .063]). Therefore, Hypothesis 3 was supported.

**Hypotheses 4a and 4b.** Team and individual empowerment were hypothesized to sequentially mediate the relationships between LLX and job satisfaction and job performance. On the basis of coefficients presented in Figure 2, with 20,000 Monte Carlo replications, we found that the indirect effect for LLX $\rightarrow$ team empowerment $\rightarrow$ individual empowerment $\rightarrow$ job satisfaction was 0.015, with a 95% CI of [0.007, 0.023]. Additionally, we found that the indirect effect for LLX $\rightarrow$ team empowerment $\rightarrow$ individual empowerment $\rightarrow$ job performance was 0.005, with a 95% CI of [0.004, 0.007]. Thus, both indirect relationships were significant, supporting Hypotheses 4a and 4b and suggesting that LLX positively related to subordinates’ work outcomes through its relationships with team and individual empowerment.

**Hypothesis 5.** Hypothesis 5 predicted that LLX moderates the relationship between LMX and individual empowerment. The multilevel modeling results demonstrated a positive effect of LLX on the random slope between LMX and individual empowerment ($\gamma = .04, p < .01$). Following Cohen, Cohen, West, and Aiken’s (2003) recommendations, we plotted this interaction at conditional values of LLX (1 SD above and below the mean). As shown in Figure 3, when LLX was higher, the relationship between LMX and individual empowerment was stronger. Therefore, Hypothesis 5 was supported.

**Hypotheses 6a and 6b.** To test Hypotheses 6a and 6b, we estimated the indirect relationships of LMX with outcomes via individual empowerment at higher (+1 SD) and lower levels (−1 SD) of LLX using Bauer et al.’s (2006) method. For job satisfaction, the indirect effect was higher when LLX was higher (Estimate = .10, SE = .01, p < .01) than when LLX was lower (Estimate = .07, SE = .01, p < .01; z = 2.50, p < .05). For job performance, the indirect effect was higher when LLX was higher (Estimate = .03, SE = .01, p < .01) than when LLX was lower (Estimate = .02, SE = .01, p < .01; z = 1.98, p < .05). Taken these results and the test results for Hypothesis 5 together, Hypotheses 6a and 6b were supported.

**Discussion**

There has been growing interest in studying how supervisors’ upward exchange relationships influence subordinates’ work-related outcomes (e.g., Tangirala et al., 2007; Venkataramani et al., 2010). This study contributes to this research stream by explicating a broader set of individual- and team-level mechanisms through which supervisors’ upward exchange relationships influence subordinates’ work outcomes and the mediating role of empowerment in these mechanisms. As hypothesized, we found that LMX and individual empowerment sequentially mediated the positive relationships between LLX and subordinates’ job satisfaction and job performance. Furthermore, LLX was positively related to team empowerment, which in turn was positively related to individual empowerment. Moreover, we found that LLX moderated the indirect relationships of LMX with job satisfaction and job performance via individual empowerment, such that the positive indirect relationships of LMX with individual-level outcomes became stronger when LLX was higher.

These findings have several theoretical implications. First, we delineated in the present study a more comprehensive account of how LLX relates to important subordinates’ outcomes. Specifically, we showed in the present study that LLX was positively related to a supervisor’s LMX with his or her subordinates, providing support to the first mechanism proposed (i.e., supervisors model their LLX to develop and maintain LMX). In other words,
when LLX is higher, on average, subordinates have a better quality LMX with the supervisor. We also found that LLX was positively related to subordinates’ job satisfaction and job performance, which was mediated by team empowerment and individual empowerment. These results provided support to the second mechanism of LLX (i.e., LLX promotes team empowerment), which provides a motivating context for individuals within the team. Finally, we also found that LLX moderates the relationship between LMX and outcomes, which suggest that LLX can reinforce lower level outcomes (i.e., team members’ individual empowerment, satisfaction, and performance) associated with LMX. By delineating and supporting these three mechanisms simultaneously, we integrated and extended in the present study previous findings (e.g., Tangirala et al., 2007; Venkataramani et al., 2010), providing a more comprehensive understanding of how and why LLX can relate to employees’ outcomes at lower organizational levels. Moreover, these findings were obtained from more rigorous empirical examination of relationships involving LLX, relative to prior work, by using a time-lagged design and collecting data from multiple sources. Thus, the present study offers a constructive replication of prior findings from LMX, LLX, and empowerment research (e.g., Chen et al., 2007; Tangirala et al., 2007).

Second, although previous research has argued that leaders’ upward exchange relationships might have an influence on subordinates’ outcomes (e.g., Graen et al., 1977), little effort has been devoted to empirically examine how this effect is manifested. We addressed this gap in the present findings by demonstrating the mediating role of empowerment at both individual and team levels. Our findings suggest that motivational processes are effective mechanisms through which leaders’ upward exchange relationships can relate to subordinates’ outcomes. We also showed that LLX relates to individual empowerment through team empowerment, suggesting that LLX is associated with individual outcomes by helping to shape a more motivating team context, as captured by team empowerment. This provides explanations to why team leadership behaviors, such as empowering leadership (Chen, Sharma, Edinger, Shapiro, & Farh, 2011), which are not directly targeted at individuals but rather at the team as a whole, could still motivate individual team members personally. From another perspective, these findings also contribute to the leadership literature by suggesting that relationships involving leadership constructs at the individual (e.g., LMX) and team levels (e.g., LLX) may be mediated by motivational states (i.e., empowerment) and that the quality of leader’s relationship with upper managers might strengthen the relationships between LMX and individual outcomes.

Third, this research has also provided an important integration between prior theories of leadership, teams, and motivation. In particular, our research combined prior theoretical and empirical work on LMX and LLX (e.g., Graen et al., 1977; Tangirala et al., 2007) with Chen and Kanfer’s (2006) model of team motivation to provide a broader understanding of how social exchanges between leaders and their followers at multiple organizational levels can relate to a more motivating team context. In doing so, our study has shown that the quality of LLX serves as an important conduit through which resources available from the broader organizational environment may translate into a more motivating team context as well as strengthen the motivating potential of LMX relationship. Answering prior calls for greater attention to the broader context within which teams operate (e.g., Ilgen, 1999), this serves to also broaden researchers’ theoretical understanding of how team leaders’ relationships with their supervisors (LLX) and their subordinates (LMX) help link teams to their external environment and the important role of motivation and empowerment in these processes.

Finally, the cross-level relationship between LLX and LMX demonstrated in the present study also provided interesting implications for which factors can possibly mediate the positive effect of supervisors’ lateral and upward exchange relationships on subordinates’ outcomes. Venkataramani et al. (2010) found that the quality of supervisors’ LLX and their centrality in the peer network were related to their subordinates’ perception of their status and that status mediated the relationship between LLX and LMX. Our study showed that this mediation link can further extend to subordinates’ individual empowerment, which in turn positively relates to subordinates’ job satisfaction and job performance. Taken the results from these two studies together, it is suggested that leaders’ social capital within the organization (i.e., their network centrality and LLX) can cascade down to influence subordinates’ motivation through exchange relationships leaders develop with their subordinates.

**Strength, Limitations, and Future Research Directions**

From a methodological perspective, a major strength of this study is that we collected data from multiple sources at different time points, which reduces potential biases that may result from common method variances (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Second, the proposed model was estimated following a general path-analytic framework (i.e., all hypothesized relationships were estimated simultaneously), hence alleviating problems that are associated with piecemeal and causal step approaches for testing mediation (Bauer et al., 2006; Edwards & Lambert, 2007; Preacher et al., 2010). As such, the results from this study provided a rigorous empirical examination of our hypothesized multilevel model. Finally, the present study included both job attitudes and job performance measures as the outcomes, which extended the criterion space of prior LLX research.

However, this study also suffered from several limitations. One important weakness of our study is that we did not directly capture the resources supervisors and subordinates received as results of LMX and LLX, respectively. Although drawing on the social exchange theory, previous studies have made strong cases that the effects of LMX (e.g., Wayne et al., 1997) and LLX (e.g., Tangirala et al., 2007) on employees’ motivation are likely to be functions of resource exchanged between the leader–member dyad, few studies directly examined this resource-based mechanism by directly measuring the resources exchanged (Cropanzano & Mitchell, 2005). As such, future studies may directly examine the relationship between LLX and resources received by supervisors from their own supervisors, and how these resources may facilitate the beneficial effects of LMX to confirm the resource-based mechanism.

Another weakness of our study is that LMX, individual empowerment, and team empowerment were measured from the same source at the same time. Although logistic constraints within the organization did not allow us to measure predictors and mediators at different times, we examined the factor structure of the measures in subordinates’ self-report surveys and confirmed that these measures captured distinct constructs. There are also two theoretical
reasons to support the direction of the relationships we found. First, leaders usually assume dominant roles in organizations. Thus, it is more likely to expect a causal influence from leadership construct (e.g., LMX) to subordinates’ motivation (e.g., individual empowerment) than the other way around. Second, in mature teams, top-down processes usually are more influential than bottom-up processes (Kozlowski & Klein, 2000). Therefore, it is more likely that team empowerment influences individual empowerment rather than vice versa. With that said, results from our study could also be explained by alternative mechanisms considering that some third variables were not measured in our study. For example, it is possible that the positive relationship between LLX and team empowerment was mediated by leaders’ charisma or transformational leadership behaviors, because supervisors who have more resources may be perceived as more charismatic and may persuade subordinates more easily.

Moreover, there may be alternative explanations for the observed association between LLX and LMX. It is possible that leaders develop LMXs before they start working with a new upper level manager. Given that the leader’s exchange relationship with other organizational members can be observed (Duchon et al., 1986), it is possible that when the upper level manager observes that some supervisors have better exchange relationships with their subordinates, he or she wants to develop a better quality LLX with them. It is also likely that there are some moderators on the relationship between LLX and LMX. For example, some supervisors do not want to or cannot model their supervisors’ relationship-building behaviors in developing LMX. It is also possible that organizational contextual factors, such as organizational climate and culture, are positively related to both LLX and LMX. It is important to note that time can be a potential moderator on the relationship between LLX and LMX (Kozlowski & Klein’s, 2000). In matured organization, LLX is more stable and may serve as a contextual factor of LMX, whereas in newly started organizations and organizations going through major changes, LLX may emerge from LMX. Finally, it is possible that it is the subordinates who are taking initiative in building LMX because low-quality LMX is more costly when LLX is of high quality. However, this explanation also predicts the LLM is related to LMX. It is important that a more rigorous research design is used in future studies to clarify the causal relationships among these variables and to test competing mechanisms.

A third limitation of our study is that supervisors’ subjective evaluations of subordinates’ job performance was used. Therefore, LLX and job performance ratings were from the same source. However, we measured these two constructs at separate time points to minimize common method variance. Future studies could consider whether our model holds when using objective performance measures. Also, we proposed and tested the mediating roles of individual and team empowerment. It is possible other variables could also capture the motivational process underlying the link between LLX and subordinates’ outcomes, such as trust or self-set goals. Other mediators could be examined in future studies to further confirm this motivational process.

Fourth, the Chinese sample used in the present study may limit the generalizability of the present findings. For example, the Chinese culture is considered high on power distance, which is the extent to which individuals accept unequal distribution of power in institutions and organizations (Hofstede, 2001). In such a high-power distance culture, the moderating effect of LLX on the relationship between LMX and individual empowerment is likely to be stronger than that in low-power distance culture, as individuals in high-power distance cultures are more likely to rely on their supervisors to obtain useful resources to perform their jobs (i.e., resources for supervisors to perform leadership duties) than seek resources from peers or subordinates. However, previous empirical research in which the relationship between team leadership and empowerment has been examined did not reveal significant differences across U.S.-China samples (Chen et al., 2011). Nevertheless, our findings could be replicated in future research using samples from other cultures, especially those lower on power distance.

Practical Implications

Our findings also provide some suggestions for practice. First, our findings suggest that leaders’ social capital, captured by higher quality LLX, is related to how well leaders can effectively empower their teams and individual subordinates and therefore relate to an increase in their subordinates’ job satisfaction and job performance. Hence, organizations can help leaders develop skills for building better and stronger relationships with their own superiors, which could possibly relate to increases in perceived empowerment of their teams and their individual subordinates. To facilitate supervisors to develop and maintain high-quality upward exchange relationships, organizations can encourage supervisors’ supervisors to engage in more formal and informal social interactions with their subordinates, provide financial support for social events between supervisors and their own supervisors, and develop formal leadership development or mentoring programs for supervisors. Second, our findings also suggest that leaders’ dyadic relationships with their employees are more likely to positively relate to employees’ sense of empowerment when leaders also have positive relationships with their own leaders. This suggests that organizations should aim to develop a broader climate that encourages trust and supportive relationships across organizational levels. For example, establishing and maintaining high-performance work systems can ensure the development of a supportive climate and higher quality of relationships across organizational levels (e.g., Takeuchi, Lepak, Wang, & Takeuchi, 2007). It is important to note that it is possible that having an empowered team and empowered subordinates could make the leader look good in the eyes of his or her leaders, thus he or she is more likely to have a higher quality LLX with the upper level. Therefore, developing and maintaining a good relationship with one’s subordinates might benefit the supervisors themselves as well. Finally, findings from our study suggest that empowerment plays a pivotal role in the indirect relationships between LLX and subordinates’ job satisfaction and job performance. Therefore, organizations should pay attention to the level of team and individual empowerment. Organizations can train supervisors to understand the meaning of empowerment and provide them with feedback regarding the empowerment experienced by the teams and individuals reporting to them. Considering that our study shows that one antecedent of empowerment is supervisors’ exchange relationships, organizations can also educate supervisors to be more aware of the effects of their exchange relationships on their subordinates’ perceived empowerment.
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