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# Leader–Member Exchange: Recent Research Findings and Prospects for the Future

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## INTRODUCTION

Leader–member exchange (LMX) theory is rooted in the principle that each leader–follower relationship within a work group is unique, varies in quality, and should be studied as a dyad. LMX theory rejects the practice in other leadership approaches of averaging the perceptions that each follower holds of the leader in order to determine leadership style (Dansereau, Graen, & Haga, 1975). Since the inception of LMX theory, a number of studies have shown that the dyadic relationship quality develops quite early, and remains generally stable through the life of the dyad (e.g., Liden, Wayne, & Stilwell, 1993). The LMX development process is heavily influenced by affect, which contributes toward the growth of mutual trust, liking, and respect. Some of the determinants of LMX are perceived similarity and liking between leader and member, expectations from each other, leader delegation, and member performance (Bauer & Green, 1996; Liden et al., 1993). Drawing on social exchange theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960), LMX literature maintains that dyadic relationship quality exerts significant influence on a wide variety of organizational outcomes, such as in-role performance, citizenship behaviors, overall job satisfaction, and turnover intentions (e.g., Gerstner & Day, 1997; Ilies, Nahrgang, & Morgeson, 2007).

In this chapter, we review developments in LMX theory and research since the last comprehensive review by Erdogan and Liden (2002). Therefore, this review is based on empirical and theoretical papers cited in social sciences indexes since 2002. Apart from a few exceptions, we did not discuss conference papers or unpublished manuscripts, but we did include several studies that were not part of the last three reviews (Erdogan & Liden, 2002; Liden, Sparrowe, & Wayne, 1997; Schriesheim, Castro, & Cogliser, 1999). Database searches between 2002 and 2009 yielded 130 studies focusing on LMX. More than 70% of these studies examined antecedents and consequences of LMX, in line with Erdogan and Liden's (2002) observation regarding LMX researchers' continued interest in these topics. Although the determinants and outcomes of LMX still dominate scholars' interest, the mature stage of LMX theory demands attention to factors that set boundaries for the effects of LMX (Liden et al., 1997; Schriesheim et al., 1999). Therefore, this review focuses on studies that explore the context of LMX.

We found empirical and conceptual studies examining the context of LMX in three distinct ways. First, several studies indicated a burgeoning interest in understanding the linkages between LMX and work-group dynamics. LMX is inherently a process of differentiation whereby leaders establish high-quality relationships with only a few followers (Liden, Erdogan, Wayne, & Sparrowe, 2006).

LMX differentiation can affect outcomes at the individual level in one way and outcomes at the group level in another. Consequently, LMX differentiation studies have examined the effects of LMX at the individual level, meso level, and the group level (e.g., Liden et al., 2006). Secondly, a number of scholars have attempted to further our understanding of how LMX works in different societal contexts. Research in this tradition falls into two categories: studies that generalize LMX theory to other national cultures (e.g., Aryee & Chen, 2006; Schyns, Paul, Mohr, & Blank, 2005; Varma, Srinivas, & Stroh, 2005), and studies that specifically examine the relationship between various dimensions of culture and LMX (e.g., Erdogan & Liden, 2006; Schaubroeck & Lam, 2002). Finally, a few LMX scholars have endeavored to understand the effects of LMX in the context of other leadership theories (e.g., Wang, Law, Hackett, Wang, & Chen, 2005). LMX differs from other leadership theories in at least two ways: first, most leadership theories focus on leader behaviors and treat followers as passive recipients; Second, LMX focuses on dyadic exchanges which are more proximal to organizational outcomes (Wang et al., 2005). Therefore, an integration of LMX with other leadership theories can shed light on how leadership works at different levels.

Our review of recent LMX studies, many of which have focused on the context in which LMX relationships are embedded, begins with a detailed discussion of LMX differentiation, associated issues of fairness, and the possibility of in-group and out-group formation. Then we look at studies that have examined the outcomes of LMX in the context of national culture. Specifically, we focus on research that incorporates two of the most important dimensions of culture: namely, individualism/collectivism and power distance. We also discuss high/low context because cultures vary in their strength, which can affect LMX relationships. Then we turn our attention to studies that relate LMX theory to other theories of leadership. In particular, researchers have viewed LMX theory as related to, but distinct from, transformational leadership (Bass, 1985) and servant leadership (Greenleaf, 1977) theories. Therefore, this review examines studies incorporating these two theories along with LMX theory. We conclude with a discussion of weaknesses in LMX theory and recommendations for future researchers.

## LMX DIFFERENTIATION

LMX theory is based on the premise of differential quality of relationships between leaders and

subordinates. High-quality relationships go beyond the contractual agreement and are characterized by mutual influence, negotiability, and trust and respect (Dansereau, et al., 1975; Liden & Maslyn, 1998). On the other hand, low-quality relationships are bound by terms of the employment contract, and tend to be transactional. LMX scholars have proposed that differentiation between subordinates allows leaders to make efficient use of their limited time and resources. Leaders vary in the extent to which they differentiate between their subordinates, though most leaders tend to form exchanges of differing quality with their subordinates; only in rare cases do leaders establish similar quality relationship with all subordinates (Liden & Graen, 1980), thus creating a group with a low degree of variability in LMX quality (i.e., low LMX differentiation). These leaders form work groups consisting of all high LMX or all low LMX relationships.

Work-group members are likely to engage in within-group social comparison processes (Festinger, 1954), which can affect their perceptions of fairness (Masterson, Lewis, Goldman, & Taylor, 2000) and subsequent outcomes. High-LMX relationships include tangible rewards, such as challenging assignments and training opportunities (Liden, Wayne, & Sparrowe, 2000), and intangible rewards, such as leader's trust and respect (Graen & Uhl-Bien, 1995), which are not available to members with low-quality LMX. This differential distribution of rewards may create perceptions of inequity in low LMX members (Liden et al., 1997). The differentiation that seems fair and favorable to the high LMX members is likely to be viewed as inequitable and adverse to those with lower-quality LMX. LMX scholars have noted that while the personal quality of LMX may be beneficial to an individual employee, the variability across group members violates the equality principles of fairness (Scandura, 1999), which are fundamental to group solidarity (Greenberg, 1982). These issues of fairness, innate to LMX differentiation, have the potential to split the work group in subgroups based on members' LMX quality.

In one of the earliest investigations of within-group differentiation, Sias and Jablin (1995) found that employees considered differential treatment from the leader to be unfair unless supported by clear evidence of competence. Perceptions of unfairness in turn led to disliking of and reduced communication with the favored person. On the other hand, group members who were targets of adverse leader differentiation did not receive liking or sympathy from the group; if the adverse differentiation was deemed fair the group members distanced themselves from the disfavored ones. These findings show that LMX differentiation can

divide the work group into an in-group and an out-group consisting of members with high and low LMX, respectively, thereby leading to intra-group relational problems, such as mutual dislike and rejection that are detrimental to the overall group.

The link between LMX differentiation and formation of subgroups can also be understood by applying Heider's (1958) balance theory, which proposes that members of a triad tend to seek relational balance. Balance theory implies that if two coworkers have high-quality relationships with the leader, they are likely to have a high-quality relationship with each other as well. Consistent with balance theory, Sherony and Green (2002) found a positive association between the quality of relationship between coworkers and the similarity in their LMX quality. Their findings suggest that coworkers with high LMX are likely to develop good relationships with each other, and poorer relationships with their counterparts with lower LMX, thus effectively creating two subgroups. Based on full social network data, Henderson and Liden (2007) replicated Sherony and Green's findings by showing that individuals with similar LMX quality reported greater social closeness with similar peers. Interestingly, however, these researchers also found that members with low LMX quality reported stronger friendship ties to high LMX members than high LMX members reported for low LMX peers. Thus, it appears that group members, regardless of LMX status, tend to show a preference for interacting with higher LMX individuals. Similarly, Lau and Liden (2008) found that group members tend to place more trust in fellow group members who are most trusted by their leader.

Perceptions of unfairness and potential for subgroup formation associated with LMX differentiation merit more theorizing and empirical examination. However, despite repeated calls for research to examine LMX in the context of work groups (Erdogan & Liden, 2002; Graen & Uhl-Bien, 1995; Liden et al., 1997), only a handful of studies have looked beyond the effects of individual LMX quality. We found one theoretical and seven empirical articles on LMX differentiation published since 2002. In the only conceptual article devoted to LMX differentiation, Henderson, Liden, Glibkowski, and Chaudhry (2009) reviewed extant research and proposed a model of antecedents and consequences of differentiated relationships between leaders and members in the context of work group and the organization. Henderson and colleagues proposed that LMX differentiation was a consequence of

- leader characteristics, such as leadership style,
- member characteristics, such as desire to be a permanent employee,

- group characteristics, such as size and composition, and
- organizational characteristics, such as structure, culture, and HR practices.

Employee outcomes of differentiation were proposed at the individual, group, and organizational levels, while leader outcomes, such as career success and performance, were proposed at the individual level. The authors discussed appropriate levels of analyses, and offered suggestions for future research that accounted for the multi-level nature of differentiation processes.

Although LMX differentiation is theoretically conceptualized at the group level, it has been analyzed at the individual, meso, and group level (Klein, Dansereau, & Hall, 1994; Yammarino, Dionne, Chun, & Dansereau, 2005). Accordingly, studies focusing on LMX differentiation can be classified in three categories:

1. Individual level studies that employ measures designed to capture individual perceptions of how much the leader differentiates amongst the group members, and examine outcomes for individual employees.
2. Group-level studies that utilize statistical measures of within-group LMX variability, such as standard deviation or  $r_{wg}$  of group member's LMX scores, and examine outcomes for the group as a social entity.
3. Multi-level studies that use statistical measures of within-group variability to examine cross-level effects involving individual employee variables, work-group variables, and in some cases include the organization level (Erdogan, Liden & Kraimer, 2006).

Out of the seven studies investigating LMX differentiation that we located, two were at the individual level of analysis, three were at the group level, and the remaining two used multilevel analysis.

### **Individual-level studies**

In one of the first quantitative studies of LMX differentiation, Van Breukelen, Konst, and Van Der Vlist (2002) found that LMX differentiation attenuated the relationship between LMX and work-group commitment. The authors noted that member perceptions of high LMX differentiation within the unit may have created doubts about fairness and integrity of the leader, thereby neutralizing the positive effects of LMX on work-group commitment. These findings should be treated with some caution, because the perceptual measure of differentiation in this study focused on

leader differentiation among group members in terms of friendliness and feedback, and therefore did not capture variability in all aspects of LMX.

Hooper and Martin (2008) extended this line of inquiry by examining the effects of within-group variability in LMX on employee attitudes beyond the personal quality of LMX. The authors argued that LMX variability violated the principles of equality and consistency, and thus was likely to create group conflict, and reduce employee job satisfaction and well-being. Using a single-item measure to assess member perceptions of within-group variability in LMX, in a sample of 357 firefighters and 74 employees from several other organizations in Australia, the authors found that LMX differentiation was positively related to group conflict, which in turn was associated with lowered job satisfaction and well-being.

Findings of these two studies advise against differentiation in that employee perceptions of high differentiation are associated with lower group commitment (Van Breukelen et al., 2002), job satisfaction, and well-being (Hooper & Martin, 2008). These findings also imply that leaders may be able to enhance member outcomes and group solidarity by at least maintaining an appearance of equal treatment across the group.

### **Group-level studies**

In a study involving 35 groups with 162 soldiers from the Canadian army, Boies and Howell (2006) found that higher levels of mean LMX in the group were associated with higher group potency and lower group conflict. Furthermore, these relationships were *stronger* in groups with higher LMX differentiation, indicating that LMX differentiation was beneficial when group mean LMX was high, and detrimental otherwise. The authors suggested that in groups with low mean LMX, perceptions of inequity and competition for the leader's attention may have led high LMX differentiation to have an adverse effect, whereas in groups with high LMX differentiation and high mean LMX, informal leadership, defined as peer influence within the group, was responsible for the beneficial effects of high differentiation.

In a similar line of inquiry, Ford and Seers (2006) analyzed the relationship between group mean LMX, LMX differentiation, and the degree of within-group agreement on work climate in a sample of 392 employees from four organizations based in Europe and the USA. Drawing from action theory, the authors showed that group mean LMX was positively, and LMX differentiation was negatively, related to within-group agreement on climate.

In a somewhat different approach from these two studies, Schyns (2006) hypothesized relationships between group consensus on LMX (opposite of LMX differentiation) and outcomes. In a sample of 54 work groups with 234 dyads from 22 banks and insurance companies in Germany, Schyns found a positive relationship between group consensus (only on the contribution dimension of LMX) and group mean level of job satisfaction. Findings also led Schyns to conclude that LMX consensus could compensate for low work values to increase group performance.

Taken together these studies show that high group mean LMX, resulting from high-quality relationships between the leader and most group members, leads to positive outcomes, such as higher group potency, lower group conflict (Boies & Howell, 2006), and within-group agreement on climate (Ford & Seers, 2006). Large degrees of differentiation were associated with negative outcomes, such as low within-group agreement on climate and low job satisfaction (Schyns, 2006). These effects were moderated by group-work values and average quality of LMX, such that differentiation can be beneficial in groups with an overall positive tone of relationship between leader and members. More research is needed to identify group-level variables that enhance positive rather than negative effects of differentiation.

### **Multi-level studies**

In one of the first multi-level investigations focused on LMX differentiation, Liden et al. (2006) studied the effects of within-group variability in LMX quality on both individual and group performance in 120 work groups containing 834 dyads representing 6 US organizations. The authors found LMX differentiation to be positively related to individual performance only for group members with low-quality LMX. Group performance was positively associated with LMX differentiation in work groups with high levels of task interdependence as well as in groups with low median LMX. These findings highlight the need to examine group context in order to understand the relationship between differentiation and outcomes.

Further extending the multi-level line of inquiry, Henderson, Wayne, Shore, Bommer, and Tetrick, (2008) examined LMX differentiation at the individual-within-group level and at the group level. Based on earlier work by Graen, Liden, and Hoel (1982), Henderson and colleagues examined 'relative LMX' (RLMX), defined as relative standing of the focal employee within the group in

terms of their LMX quality (operationalized as employee's LMX minus the LMX mean for the group). Using a sample of 31 work groups with 278 dyads from four manufacturing facilities, Henderson and colleagues found positive association between RLMX and employee psychological contract (PC) fulfillment, which was stronger in groups with higher levels of differentiation. After controlling for personal quality of LMX, RLMX influenced employee in-role performance and citizenship behaviors through PC fulfillment. These findings show the importance of examining differentiation processes simultaneously at the individual-within-group and group levels.

Both the Liden et al. (2006) and Henderson et al. (2008) studies underscore that differentiation is a multifaceted phenomenon that can be understood only when examined at multiple levels. Examining differentiation at only the individual level may lead to incorrect conclusions about its adverse effects (Hooper & Martin, 2008; Van Breukelen et al., 2002). It appears that the effects of differentiation are not universally good or bad; it is the group context which determines the nature of the outcome. Some group-level studies that have ignored other contextual variables have shown negative effects of differentiation (Ford & Seers, 2006), but others have shown positive effects of differentiation in groups with high average LMX quality, suggesting leaders should maintain an appearance of high-quality relationships with all followers (Boies & Howell, 2006).

LMX differentiation is a complex phenomenon that can be better understood through an examination of moderators. For example, Liden et al. (2006) found a significant relationship between LMX differentiation and group performance only when task interdependence was high or average LMX quality was low, suggesting that differentiation could be seen as equitable in highly interdependent groups as it allowed leaders to better coordinate the contributions of the group. More studies are needed to explore the conditions under which LMX differentiation may enhance or thwart performance within the group. Given that groups are widely used in organizations (Cohen & Bailey, 1997), group contextual factors, such as group justice climate, can serve as a *situational enhancer* (Howell, Dorfman, & Kerr, 1986) and may influence the strength with which LMX differentiation relates to group performance.

Just as aspects of the context inform relationships between LMX differentiation and outcomes, more needs to be learned about the influence of contextual variables on the antecedents and consequences of individual LMX quality. Thus, we turn our attention to initial studies that examine LMX in the context of societal or national culture. Increasing globalization has

increased researchers' interest in the generalizability of LMX theory in different national cultures (e.g., Aryee & Chen, 2006; Erdogan & Liden, 2006). National culture refers to the norms, values, beliefs, and assumptions that are shared by members of a nation, and guides their interpretation of the world (Hofstede, 1980, 1984; Markus & Kitayama, 1991). Thus, culture is likely to influence the way people interpret, view, and react to the quality of LMX relationships. Because culture dimensions differ in terms of their relevance to LMX (Erdogan & Liden, 2002), in the following section, we examine the way in which two well-developed cultural dimensions, collectivism/individualism and power distance, relate to LMX. We also discuss how high and low cultural context may influence the quality of LMX relationships.

## NATIONAL CULTURE AND LMX

### *Collectivism/individualism*

Triandis (1988, p. 60) observed that collectivism/individualism is 'perhaps the most important dimension of cultural differences in social behavior.' For collectivists, building and maintaining interpersonal harmony is a primary concern. Collectivists identify themselves in terms of group membership via the depersonalization process (Hofstede, 1980) and are interdependent with their groups (Triandis, 1996). On the other hand, individualists emphasize personal benefits, self-fulfillment, and personal autonomy, and are independent of groups (Hofstede, 1980). In contrast to collectivists who give group membership higher priorities, individualists tend to prioritize self and focus on enhancing their self-esteem (Triandis, 1996).

A handful of studies have linked collectivism/individualism to LMX and suggested that collectivists are concerned about maintaining harmonious relationships within the group, and thus high-quality LMX relationships are less salient to collectivists than individualists. For example, Hogg, Martin, Epitropaki, Mankad, Svensson, and Weeden (2005) made a distinction between personalized and depersonalized leadership: consistent with LMX theory, personalized leadership was defined as the leader-formed relationships of differing quality with subordinates, whereas consistent with low LMX differentiation (Liden et al., 2006), depersonalized leadership was portrayed as cases in which the leader treated all followers consistently. Hogg and his colleagues (2005), using a sample of 128 from India, found the opposite of their hypothesis: it was individualists rather than collectivists who considered a depersonalized

leadership more effective and collectivists who preferred personalized leadership. It is possible that this result emerged because collectivists value effective interpersonal relationships in the group and personalized leadership is characteristic of leaders who develop personal relationships with members.

Other researchers have taken a situational approach by investigating how collectivism/individualism influences the strength of the relationship between antecedent factors and LMX. Findings of these studies have been mixed. For instance, Schaubroeck and Lam (2002) found that, within a sample of employees in the USA and Hong Kong representing the same multinational bank, supervisors were more likely to form high-quality LMX relationships with subordinates who had similar personality with them regardless of work-unit collectivism/individualism. In contrast, although it was not hypothesized, they found that collectivism/individualism interacted with peer-peer personality similarity in building LMX relationships. Specifically, peer-peer personality similarity was positively related to LMX among the more individualistic work-unit cultures, whereas the relationship was not significant in work groups with relatively more collectivistic cultures. However, after controlling for peer integration in the groups with individualistic culture, the relationship between peer-personality similarity and LMX was not significant. These findings suggest that collectivism/individualism is not a strong contextual factor with respect to the association between leader/member or member/member personality similarity and LMX quality.

Other researchers, however, have argued that as collectivists give more weight to benefiting their groups, they place more emphasis on loyalty and obligation (Sullivan, Chao, Allen, Kone, Pierre-Louis, & Krieger, 2003). When experiencing personal costs, collectivists may show greater tolerance in order to maintain good-quality relationships with their supervisors, who are typically seen by collectivists as prototypical group members (Turner, 1991). For example, drawing on justice theory, Erdogan and Liden (2006) found collectivism/individualism to be a significant moderator of the relationship between organizational justice and LMX. Specifically, in a sample of textile manufacturing employees in Turkey, for individuals high in collectivism, interactional justice was less positively related to LMX than for those low in collectivism. Similarly, for collectivists, distributive justice was not associated with LMX, but for individuals low in collectivism distributive justice was positively related to LMX. In general, the empirical evidence linking collectivism/individualism to LMX theory is limited.

Although we know that the relationship between certain antecedents and LMX may be contingent on collectivism/individualism, we do not fully understand whether the formation, social exchange process, and consequences of LMX relationships may differ due to the extent of collectivism/individualism dominant in the cultural context (Avolio, Walumbwa, & Weber, 2009). For example, even though LMX research has consistently shown a positive relationship between individual performance within samples spanning multiple countries, little attention has been paid to the question of whether cultural factors such as collectivism/individualism alter the extent to which LMX is linked to performance. It is possible that for collectivists who rely more on cooperation and coordination with coworkers, high-quality relationships with supervisors may be a less important motivator for employees to improve their performance than may be true of individualists.

### **Power distance**

At the societal level, power distance is defined as the extent to which members expect and accept unequally distributed power in institutions and organizations (Hofstede, 1980). According to Hofstede (1984), in high power distance contexts, individuals view unequal status distributions as legitimate, and opinions and views from the high power status members are seen as appropriate and acceptable. In contrast, in low power distance cultures, individuals may feel less comfortable with power differences between leaders and followers. Cross-cultural research maintains that compared to countries with lower power distance (e.g., England), authority figures in countries high in power distance (e.g., China), in general, have more centralized power and greater influence on decisions, such as employee compensation, selection, and promotion (Wang & Heller, 1993). Thus, one may expect that in a culture with greater power distance, individuals are more likely to regard leaders as controlling resources for accomplishing tasks and accept their leader's power for compensation and punishment, which is an important antecedent for building high-quality LMX relationships with their leaders (Aryee & Chen, 2006). In contrast, research has shown that individuals in a lower power distance culture desire more autonomy and prefer self-management rather than depending on their supervisors' assistance and help (Adler, 1997; Kirkman & Shapiro, 1997). Thus, in a lower power distance culture, the social exchange process in a high-quality LMX relationship may be less salient to employees than it is in high power distance cultures.

Though power distance is quite relevant to authority relationships, particularly between leaders and followers (Erdogan & Liden, 2002), very little research to date has explored the effect of power distance on outcomes of LMX. We found only one study that examined the effect of leader's power distance on the relationship between LMX and task performance and citizenship behaviors (Anand & Vidyarthi, 2008). Findings of the study indicated that power distance attenuated the positive association between LMX and citizenship behaviors. Furthermore, this effect was more pronounced in highly interdependent work groups, because close interaction between colleagues communicated leader's power distance more clearly. These findings suggest that investigating the joint impact of power distance and LMX in influencing individual effectiveness would afford us a better understanding of employees' attitudes and behaviors in the workplace.

### **High/low context**

High or strong culture contexts are characterized by distinctive and particular values, beliefs, and assumptions that are shared by members in the social units (Hall, 1976; Schein, 1985). In contrast, low or weak cultures possess weakly shared values, and are less stable and intense (Schein, 1984). Although both weak and strong cultures may influence members' behaviors (Deal & Kennedy, 1982), strong cultures have been shown to enhance performance (Denison, 1984), commitment, ethical behavior, and reduce job stress (Posner, Kouzes, & Schmidt, 1985).

Research has shown that national culture and leadership are interdependent. On the one hand, leadership plays a critical role in forming and shaping culture (Schein, 1985) and is a critical part of performance-related cultural processes (Saffold, 1988). On the other hand, leadership is contingent on culture (House & Javidan, 2004). This is because national culture has a long and rich history (Clark, 1970), and creates values and meanings that are shared by every new generation. Indeed, researchers have shown significant relationships between national culture and prevailing leadership prototypes: i.e., how leaders are expected to think and behave (Gelfand, Erez, & Aycan, 2007). Even though there is no existing research linking high/low culture context to LMX, strong cultural contexts are likely to have a greater impact on the interpersonal processes between leaders and members because a strong culture can act as a more powerful social control mechanism (O'Reilly & Chatman, 1996), which predetermines the members' behaviors and guides

their social interactions (Schein, 1990). In a culture with widely shared values, if relationship building is paramount, members are more likely to form high-quality LMX relationships with their leaders. In contrast, when a strong culture encourages individual members to show more independence in making decisions and accomplishing goals without leaders' support and help, members may be less concerned about developing high-quality LMX relationships. This reasoning may open a new channel for future research to link high/low context national culture literature to LMX study.

In addition, another interesting avenue for future research is to examine the role of the cultural context in influencing the way LMX relates to individual members' behaviors and performance. For instance, in a strong culture (e.g., a high power distance culture) which endows leaders with more power and resources, LMX has a greater influence on individual members' performance, because leaders are capable of passing down resources and providing support for improving members' performance (Erdogan & Liden, 2002). Furthermore, as Saffold (1988) noted, culture consists of different traits and each particular trait may affect organizational processes differently. It is probable that under a strong culture context, shared meanings may help members in high-quality LMX relationships to adhere to traditional working methods and procedures while limiting their capability for creative performance. As evidenced by the GLOBE leadership studies (House & Javidan, 2004), cultural factors are relevant to all leadership approaches. In the next section, we address the similarity between LMX and several selected leadership theories.

### **LMX VIS-À-VIS OTHER LEADERSHIP THEORIES**

LMX theory is based on an active reciprocal exchange perspective, whereby followers may choose to not take the role assigned by their leader (Graen & Scandura, 1987). This mutual exchange aspect sets LMX theory apart from other leadership theories which focus only on leader behaviors. Leadership scholars have repeatedly called for an integration of LMX literature with other theories to facilitate an understanding of the underpinnings of leader effectiveness (Avolio, Sosik, Jung, & Berson, 2003; Gerstner & Day, 1997). In the following sections we review studies that explore LMX theory concomitantly with transformational or servant leadership theory.



### ***Transformational leadership and LMX***

Transformational leadership theory and LMX theory are the most frequently examined theories in leadership literature over the past two decades (Avolio, 2005; Díaz-Sáenz, Chapter 22, this volume). Researchers have noted that LMX is congruent with transformational leadership in some respects. Both of these theories are rooted in the social exchange process. LMX can be both transformational and transactional, as LMX relationships often begin with transactional material exchange and subsequently evolve into transformational social exchange (Graen & Uhl-Bien, 1995). Similarly, transformational leaders can offer intangible rewards via intellectual stimulation and individualized consideration within a dyadic social exchange, such as an LMX relationship (Basu & Green, 1997).

However, some researchers have argued that LMX is distinct from transformational leadership. Whereas transformational leaders persuade individuals to suspend personal interests for the sake of the collective and to equate their own success with their contribution to organizational effectiveness (Bass, 1985), LMX is more focused on individual outcomes, such as personal growth and career development (Scandura & Schriesheim, 1994). The comparatively higher salience of LMX to individual-level outcomes has been demonstrated in a number of recent empirical studies. For instance, Howell and Hall-Merenda (1999) found LMX to be more strongly related to individual performance than both transformational and transactional leadership. Also, transformational leadership was positively related to follower performance only when leader and member worked in close physical proximity, whereas LMX was positively related to performance irrespective of physical distance between leaders and followers. In a similar vein, a handful of subsequent studies have further demonstrated that transformational leadership can be an antecedent of LMX, and LMX has a more proximal relationship with individual outcomes. For instance, Vaishali and Kumar (2003), studying employees in India, found transformational leadership to be positively related to LMX, which in turn was associated with subordinates' perceptions of organizational climate and subsequent job burnout. In a sample of 183 retail sales employees, Bettencourt (2004) found that LMX mediated the effects of contingent reward leadership and transformational leadership behaviors on change-oriented organizational citizenship behaviors (OCBs). Similarly, it has been demonstrated within a sample of research and development (R&D) professionals from manufacturing firms, R&D organizations, and research institutes in Singapore

that LMX served as a mediator in the relationship between transformational leadership and employee organizational commitment (Lee, 2005) and innovativeness (Lee, 2008). Likewise, Wang et al. (2005), studying 162 leader-member dyads of an organization in China, found that transformational leadership was positively related to individual performance via building and nourishing high-quality LMX relationships.

Other research, however, has provided a different interpretation of the relationship between LMX and transformational leadership, arguing that LMX can serve as a boundary condition for transformational leadership. Because high-quality LMX relationships are characterized by trust, respect, and mutual obligation (Dienesch & Liden, 1986), members with high LMX may be more willing to accept the influence of transformational leaders. This argument was confirmed in Piccolo and Colquitt's (2006) study of 217 individuals from a broad cross-section of job types, as these researchers found that transformational leadership was more acceptable to members with high-quality LMX relationships than to those with low-quality LMX relationships.

The main ideas emerging from existing theory and empirical studies are clear:

- LMX theory can be integrated with transformational leadership theory to further understand leaders' influence on individual outcomes
- compared to transformational leadership, LMX is more proximal to individual attitudes and behaviors across organizations in a wide variety of industries, such as information technology, retail sales, manufacturing, and in different cultures such as the USA, China, India, and Singapore

Although a growing research stream has focused on integrating these two leadership theories, an interesting omission in theory and research exists: Are LMX and transformational leadership distinct in terms of their effects on multi-level outcomes (not just individual-level outcomes) in the organization? For instance, compared to LMX, which is more proximal to individual well-being (Epitropaki & Martin, 1999), transformational leadership highlights the organization's mission and collective effectiveness rather than follower autonomy and individual interests (Bass, 1985). Thus, it is likely that LMX is more beneficial for employee career-related outcomes and well-being, while transformational leaders are more engaged in building collective effectiveness. Furthermore, given that LMX research has been criticized for being limited to the dyadic exchange process and lacking examination of the team context (Avolio et al., 2009; Hogg, Martin, & Weeden, 2004), an important next step for multi-level LMX research

would be to extend it beyond individual-level variables by examining the impact of LMX on team-level effectiveness and comparing these results with those focusing on transformational leadership.

Another potentially valuable research area is to incorporate the social context of LMX and transformational leadership. Research has consistently offered support for the positive association between both LMX and transformational leadership and a series of important individual outcomes (Gerstner & Day, 1997; Judge & Piccolo, 2004), but the puzzle of what contexts make the association stronger or weaker than the other remains unsolved (Erdogan & Liden, 2002). A comparison of the boundary conditions of both theories affords an opportunity to better understand the conditions when LMX is more (or less) effective than transformational leadership in building individual and organizational effectiveness.

### ***Servant leadership and LMX***

Servant leadership theory has gained interest among leadership researchers due to its emphasis on ethics, integrity, and moral responsibilities (Graham, 1991; Greenleaf, 1977) and its association with the rapidly developing theory of positive organizational behavior (Avolio & Gardner, 2005). Researchers suggest that LMX and servant leadership theory share similarities because both emphasize the priority of followers' development and personal growth, which may in turn provide support and resources to help individuals improve their performance through a social exchange process (Ehrhart, 2004; Liden, Wayne, Zhao, & Henderson, 2008).

Despite the overlaps, LMX and servant leadership theories have at least three key distinctions. First, servant leadership emphasizes exploring 'each follower's unique characteristics and interests and then assisting followers in achieving their potential' (Liden et al., 2008, p. 162). In essence, servant leaders are likely to form high-quality LMX relationships with all followers. This is consistent with Ehrhart's (2004) notion that servant leaders demonstrate high moral standards by treating every individual subordinate in a similar manner. In contrast, a key component of LMX theory is the concept of differentiation: i.e. leaders develop high-quality relationships with some but not all the followers (Liden & Graen, 1980). High LMX and low LMX only exist in relative terms. Leaders may assign more challenging tasks to followers with high-quality LMX relationships, while providing more routine work to followers with low LMX (Liden et al., 2006). Secondly,

servant leadership emphasizes leaders' personal integrity (Graham, 1991). LMX theory is also salient with respect to personal integrity, but with some differences. Whereas servant leaders cultivate their personal integrity by forging a sense of spiritual fulfillment through team membership and by forming strong long-term relationships with followers (Liden et al., 2008), leaders develop high-quality LMX relationships with their followers by providing tangible and intangible rewards (Wayne, Shore, & Liden, 1997). Thirdly, LMX theory emphasizes leaders' helping behaviors towards internal employees to aid their career development and personal growth, whereas servant leadership theory highlights leaders' social responsibility to serve both internal employees and external stakeholders, such as the surrounding communities and society as a whole (Graham, 1991).

Indeed, researchers have argued that servant leadership is positively related to but distinct from LMX and the limited empirical evidence has shown that controlling for LMX, servant leadership explains additional variance in several important individual outcomes (Barbuto & Wheeler, 2006; Ehrhart, 2004; Liden et al., 2008). Ehrhart (2004), with a sample of 254 employed university students, showed that servant leadership was related to but distinct from LMX and transformational leadership. Likewise, Barbuto and Wheeler (2006) developed a five-factor measure of servant leadership and showed that servant leadership was significantly related to several positive outcomes, including employees' extra effort, employees' satisfaction, and perceptions of organizational effectiveness. In a sample of 388 dyads, two dimensions of servant leadership were also shown to be significant predictors of LMX quality. Finally, Liden et al. (2008) used an organizational sample of 182 employees to show that servant leadership explained additional variability in community citizenship behaviors, in-role performance, and organizational commitment after controlling for LMX and transformational leadership.

Empirical research on servant leadership is still embryonic; most studies have focused on scale development and on distinguishing servant leadership from other leadership theories, such as LMX and transformational leadership. Given the resemblance and distinctiveness of the servant leadership and LMX theories, it would be worthwhile for future research to integrate the two theories to see how they build on each other to predict individual and organizational effectiveness. For instance, as Greenleaf noted in his earlier work (Greenleaf, 1977, 1991), because servant leaders put subordinates first and care about their personal growth servant leadership should result in subordinates who enjoy high levels of well-being.

LMX also emphasizes helping individual careers and development via high-quality relationship with their leaders (Epitropaki & Martin, 1999; Scandura & Schriesheim, 1994). Through an integration of the two theories, future research may address the role of follower growth and well-being to provide a new perspective on how and why one leadership may be better (or worse) able to stimulate follower personal effectiveness. This is consistent with the call from Avolio, Walumbwa, and Weber (2009) for more research on servant leadership from a 'follower-centric' perspective.

After this discussion of research on the context of LMX, we now turn our attention to the limitations of LMX research. LMX theory and research has persisted for nearly four decades, and in that time much has been accomplished towards unraveling the nature of dyadic relationships between leaders and followers; however, there are still many issues to be resolved.

## CRITICISMS OF LMX RESEARCH

A general search on the key term 'leader-member exchange' across all years in the PsychInfo database produced 428 hits. Despite the voluminous body of research that has been generated on LMX, what makes this an especially exciting theory is that there are still so many issues yet to be resolved. These issues essentially boil down to a lack of understanding of contextual factors influencing LMX relationships, limited knowledge on LMX development and the dynamics of long-term LMX relationships, as well as problems with the research methods used in LMX research.

### *Lack of understanding of the context*

Calls have been repeatedly made for research on the context surrounding LMX relationships (Dienesch & Liden, 1986; Erdogan & Liden, 2002; Gerstner & Day, 1997; Graen & Uhl-Bien, 1995; Liden et al., 1997; Schriesheim et al., 1999). As clear from the current review, some progress has been made, but much more remains to be done, especially with respect to research integrating LMX with social networks, organizational culture, and the use of multi-level designs.

### *Social networks*

To date, researchers have tended to investigate LMX relationships in isolation, failing to consider

the potential influence that the larger set of relationships surrounding specific LMX relationships might have. In fact, our search for empirical studies linking social networks and LMX identified only one article (Sparrowe & Liden, 2005). These researchers found member influence to be enhanced by sponsorship in the social networks of leaders who are themselves high in centrality in the advice network. But many other dependent variables other than influence could be explored with respect to social networks, such as access to information and resources and secondary outcomes such as performance, salary, promotions, and retention. Sparrowe and Liden's (2005) research also indicated that the influence of larger networks on specific LMX relationships and on individual members of LMX relationships may be quite complex, involving interactions between multiple network variables and between perceptual variables and social network variables (cf. Liden et al., 1997; Sparrowe & Liden, 1997). In sum, a plethora of issues surrounding the interplay between social networks and LMX wait for the attention of researchers.

### *Organizational culture*

Workplace norms, defined by organizational culture, are factors that are likely to affect social exchange relationships, including those between leaders and followers (O'Reilly & Chatman, 1996; Schein, 1985; Alvesson, Chapter 11, this volume). However, with the exception of Erdogan et al.'s (2006) study, no LMX research has examined the direct or moderating effects of organizational culture. One of the key findings of this study was that team-oriented organizations encouraged higher LMX, and team-orientation attenuated the relationship between distributive justice and LMX. Aggressiveness, on the other hand, strengthened the same relationship. This study emphasizes the need to examine linkages between LMX and other dimensions of organizational culture to further our understanding of how LMX interacts with the organization's norms.

### *Multi-level research designs*

As clearly articulated by Yammarino and colleagues (2005), most LMX research has been confined to the individual level of analysis when in most cases it should be studied from a multi-level perspective. This is because LMX relationships occur within a leader's work group, meaning that, by definition, both the individual and group levels of analysis are relevant in all studies that

include multiple members of the same work groups. Studies using convenience samples, such as students or participants in executive education workshops, contain only one person per work group, thus precluding the possibility for the examination of the group level. Although difficult to obtain, samples containing multiple organizations, including the organizational level in LMX research, are also needed (Erdogan et al., 2006; Henderson et al., 2009). Yammarino and colleagues (2005) correctly criticized the majority of LMX research for its failure to properly take multiple levels into consideration. Until 2005, when this review appeared, most LMX researchers had only studied the individual level of analysis. Fortunately, recent research has begun to investigate LMX from a multi-level perspective (e.g., Anand, Vidyarthi, Liden, & Rousseau, 2010; Chen, Kirkman, Kanfer, Allen, & Rosen, 2007; Erdogan et al., 2006; Henderson et al., 2008; Liden et al., 2006; Tangirala, Green, & Ramanujam, 2007; Vidyarthi, Liden, Anand, Erdogan, & Ghosh, in press).

In addition to the problem of failing to examine group, organizational, and cross-level issues surrounding LMX, another widespread fault of LMX research published prior to 2005 was the treatment of leader assessments of member behaviors, such as performance and OCB, as being independent when in fact they were not. In fact, in all studies in which leaders rated multiple subordinates, these ratings were not independent, and this lack of independence should have been acknowledged with appropriate analyses, such as hierarchical linear modeling.

## RESEARCH METHODS PROBLEMS

LMX research continues to be plagued by measurement problems, lack of longitudinal designs, and over-reliance on same-source data.

### *Measurement issues*

Although the most commonly used measures of LMX, the LMX-7 (Graen & Uhl-Bien, 1995) and the LMX-MDM (Liden & Maslyn, 1998), have been shown to be reliable and valid, both assess relationship quality, ignoring the essence of LMX theory, which focuses on the types and amount of resources and support exchanged. Indeed, a major theme of LMX theory is that whereas low LMX relationships represent economic exchanges based on employment contracts, high LMX relationships involve the social exchange of resources and

support that extend well beyond the employment contract. Empirical research has simply not attempted to document these differences in the exchange of resources. Although it is important to assess perceptions of relationship quality – and the LMX-7 and LMX-MDM are fine for this – the nature of the exchange also needs to be assessed if we are to more fully attempt to test LMX theory (Liden et al., 1997). Reflecting one step toward integrating the exchange in LMX research have been attempts made to develop measures of reciprocity (Uhl-Bien & Maslyn, 2003) and social/economic exchange (Shore, Tetrick, Lynch, & Barksdale, 2006). We encourage further efforts of this type.

### *Design issues/lack of research on LMX development and change over time*

Although the early LMX studies tended to be longitudinal (Dansereau et al., 1975; Graen & Cashman, 1975; Liden & Graen, 1980), only a handful of subsequent studies employed longitudinal designs (e.g., Bauer & Green, 1996; Liden et al., 1993; Sparrowe & Liden, 2005; Wakabayashi & Graen, 1984). Even the majority of studies of LMX antecedents have utilized cross-sectional designs (for an exception, see Epitropaki & Martin, 2005). Clearly, in order to develop a better understanding of LMX development, longitudinal designs, especially those involving ‘new’ leader-member dyads, are needed. Longitudinal research is also needed for exploring the evolution of LMX relationships over time. With the exception of Wakabayashi and Graen (1984) and Bauer, Erdogan, Liden, and Wayne (2006), Wakabayashi, Graen, Graen, and Graen (1988), most of the longitudinal studies conducted have spanned a year or less. To understand issues such as maintenance, deterioration, and relationship repair with respect to LMX, long-term longitudinal designs are optimal. We encourage researchers to explore LMX relationships over time, as virtually nothing is known about transitions that occur in LMX relationships across time (Bluedorn & Jaussi, 2008).

Finally, most LMX studies, even those containing multi-source data, include antecedent-LMX and LMX-consequence correlations that are based on data from the same source. As noted frequently by editors and reviewers, a viable explanation for significant correlations based on same-source data is that overall attitude or affect influences responses to questions measuring both variables. One way to deal with this problem is to collect LMX from sources other than the subordinates, such as the leader (Schriesheim, Castro, & Yammarino, 2000) or coworkers (Sherony &

Green, 2002). Paradoxically, assessment of LMX from the leader's perspective has revealed that agreement between leaders and members on LMX is typically quite low (correlations in the 0.20s; Liden et al., 1993; Scandura, Graen, & Novak, 1986). Although this low agreement has been identified as a problem (Gerstner & Day, 1997), leading some to question the validity of LMX, there is really no reason to expect high levels of agreement. When the leader's view of LMX is measured in the 'traditional' way, asking leaders the extent to which they provide support to subordinates (e.g., the extent to which the leader reports understanding the subordinate's problems and needs), social desirability response bias is likely. This is because it would be a bad reflection on a leader *not* to support all subordinates, and leader respondents to LMX questionnaires typically do not want to present themselves in a negative way, as evidenced by high means and low variance. With the resulting restriction of range, the low correlations between leader and member reports of LMX should come as no surprise. In more recent studies, the leader view of LMX has been assessed by asking leaders to report what each subordinate provides to them (e.g., the extent to which this subordinate would defend my actions in public). Because we know that leaders and subordinates put varying levels of effort into building and maintaining LMX relationships (Maslyn & Uhl-Bien, 2001), there is no reason to expect that a subordinate's perceptions of the leader necessarily corresponds to the leader's view of the subordinate. Thus, we call issue to the criticisms leveled against LMX research for low leader-member agreement. We contend that a much more productive approach is to examine leader-member agreement as a *meaningful variable* that has great potential for expanding knowledge of relationships between leaders and followers (see Coglisier, Schriesheim, Scandura, & Gardner, 2009, for an excellent example).

## CONCLUSIONS

Our review of LMX research conducted since 2002 has revealed that interest in studying LMX has not diminished, and many important developments have taken place. Perhaps the most profound trends are (1) increased attention to the context surrounding LMX relationships, such as work-group dynamics and national culture, (2) many investigations are now exploring LMX from a multi-level perspective, and (3) there has been an increment in the number of studies conducted with non-US samples, especially those

conducted in Asia, with a concurring focus on cultural variables that impinge on LMX relationships. We strongly encourage a continuation of these research directions. Despite the progress, many of the same conclusions offered by Erdogan and Liden (2002) remain. Specifically, there continues to be a need for research that enhances our understanding of (1) LMX development and change/maintenance over time and (2) the way in which the constellation of social network relationships influences specific LMX dyads.

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