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Leader–Member Exchange Theory

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Abstract

Leader–member exchange (LMX) theory is a relationship-based, dyadic theory of leadership. According to this theory, leadership resides in the quality of the exchange relationship developed between leaders and their followers. High quality exchanges are characterized by trust, liking, and mutual respect, and the nature of the relationship quality has implications for job-related well-being and effectiveness of employees. This article summarizes what LMX is, how it is measured, and the best practices in the study of LMX. Studies conducted on its antecedents, and past research related to its consequences in organizational settings are reviewed. In addition, we review issues related to multiple relationships such as differentiation and relative LMX. Finally, we conclude the article by identifying and summarizing key themes and questions for future research.

Foundations of Leader–Member Exchange Theory

Leader–member exchange (LMX) theory is a relationship-based, dyadic theory of leadership. Unlike behavioral leadership theories that focus on what leaders do, such as transformational, authentic, servant, or empowering leadership theories, LMX theory rests firmly on the assumption that leaders influence employees in their group (referred to as members) through the quality of the relationships they develop with them. A high quality relationship is characterized by trust, liking, professional respect, and loyalty (Liden and Maslyn, 1998). One of the early findings of the LMX theory is that, leaders develop relationships of varying quality with their subordinates and such differentiation characterizes a wide majority of the work groups studied (Liden and Graen, 1980). The theory inspired and served as the basis of over 600 journal articles as of December 2013, with its popularity in leadership studies steadily increasing over the years.

Researchers tend to rely on a social exchange-based rationale to explain the nature of the relationship between LMX quality and its outcomes. High-quality relationships are characterized by the exchange of valued resources. In these relationships, leaders provide support, developmental opportunities, mentoring, and other benefits to the employee. The provision of such resources results in a motivation to reciprocate to the leader on the part of members, by demonstrating behaviors such as loyalty and higher levels of voluntary behaviors. In other words, feeling obligation and high levels of commitment to the supervisor are often thought of as the link between high LMX quality and promanager and sometimes proorganizational behaviors. Furthermore, the degree to which the employees regard their leader's promises to be fulfilled is a link between LMX quality and outcomes. For example, Dulac et al. (2008) showed that psychological contract violation was a mediator of the relationship between LMX quality and outcomes including trust and turnover intentions.

When the nomological network of leader behaviors (such as transformational or ethical leadership) and outcomes (such as commitment and effectiveness) is considered, LMX quality is thought of as a mediator (e.g., Walumbwa et al., 2011; Wang et al., 2005). This is because the manner in which leaders behave toward members is an indicator of how supportive,

trustworthy, and loyal the leader is toward members, which feeds into the relationship quality positively or negatively. At the same time, studies linking leader behaviors to LMX quality tend not to adopt a longitudinal design, nor involve newly forming relationships. Thus, it could alternatively be argued that those in a high-quality exchange will perceive their leaders as more transformational, ethical, authentic, and less abusive and undermining.

Measurement of Exchange Quality

Most empirical research on LMX theory utilizes one of two measures. The LMX-7 measure (Scandura and Graen, 1984) is unidimensional and consists of seven items. The LMX-Multidimensional (Liden and Maslyn, 1998) consists of 12 items capturing four dimensions with three items each (affect, loyalty, contribution, and professional respect). The multidimensional measure consists of highly correlated dimensions falling under a second-order factor and many researchers choose to collapse the dimensions. This choice is typically driven by the research question at hand. Meta-analytic results suggest that type of measure is not an influence over observed relationships (Dulebohn et al., 2012).

Another common tendency within LMX studies is to measure LMX quality from the perspective of the employee. According to a review article by Hiller et al. (2011), in the period between 1985 and 2009, 83% of all LMX studies captured the employee perspective. When LMX is measured from the perspective of members and leaders, correlations tend to be modest. Sin et al. (2009) reported a meta-analytic correlation of 0.37 between the two. Furthermore, the correlation tends to be smaller during the early stages of relationship development, and the overlap increases as time goes by (Nahrgang et al., 2009). The lack of agreement could be explained by a number of different mechanisms. First, when employees and managers are each asked the degree to which they like, respect, and feel loyalty to the other party, it is natural that the way each party regards the other could be different. In other words, parties to the exchange are not necessarily reporting an objective reality: Instead they are reporting their thoughts about the other as an exchange partner. Because these

perceptions will influence their own attitudes and behaviors, they are each valid for the respondent. Second, each person may have different levels of success in meeting the other's expectations in their dyad. Third, leaders may be less likely to report a low-quality exchange with a team member, given social desirability concerns. Finally, the measurement approach may be responsible for some of the low observed correlations. If employees are asked to report the degree to which their manager likes, respects, and values them as opposed to the degree to which they like, respect, and value their manager, the relationship may emerge as stronger. Because of the divergence in perspectives, it seems that the employee perspective emerged as the *de facto* norm in measuring LMX quality in empirical studies. As a result, we know more about the consequences of employee perceptions of LMX quality as opposed to manager perceptions. Investigations into the implications of convergence between employee and manager perspectives are still in their infancy.

Research methodology tends to make a difference in LMX studies. Major studies of LMX tend to involve collecting data from intact teams where each member reporting to the same manager is invited to participate in the study. When researchers reach out to managers and members independently of each other, every member and leader is given the opportunity to participate in the study. In contrast, in studies using ad hoc sampling methods, researchers invite employees to participate in the study and employees are asked to give a corresponding survey to their managers. Alternatively, some studies rely on asking managers to distribute surveys to a few of the employees reporting to them. Meta-analytic evidence shows that in studies utilizing ad hoc sampling, the convergence between employee and manager perspectives of LMX quality is higher (Sin et al., 2009). Sampling bias is a possible explanation, and is, in our view, a weaker design, as it cannot rule out faking of data. At the very least, in such designs surveys are more likely to be distributed to those who have a higher quality exchange with the leader.

Development of High-Quality Relationships: LMX Antecedents

Figure 1 summarizes the antecedents and consequences we will cover in this article. While there are potentially additional

constructs we could have included, we chose to focus on the most commonly studied and most potentially impactful constructs we uncovered in our literature review. One such question is: *How are high-quality exchanges developed?* Answering this question effectively requires studying leader-member dyads as they are in the formation stage of the relationship. Such studies have been rare, but informative. As an early example of such research, Liden et al. (1993) studied 166 new university employees and their supervisors at four time periods. This study showed that contrary to researchers' expectations, demographic similarity or leader-rated performance had little influence over LMX quality. Instead, the important predictors emerged to be perceived similarity, member expectations of the leader, and leader expectations of the member. In other words, similarity-attraction phenomenon seems to play an important role in LMX development.

'Testing' of the exchange partner is thought to be at the heart of LMX development. When the relationship begins, trust develops (or does not develop) as a result of a mutual testing process (Dienesch and Liden, 1986). Employee's satisfactory responses to the testing efforts of leaders result in the development of trust on the part of the leader. Bauer and Green (1996) examined this process in a sample of new employees and managers. Graduating students at a university filled out surveys, once before, and twice after the start of their new jobs. This study showed that early positive performance of employees was reciprocated with further delegation of responsibilities on the part of managers that resulted in higher levels of performance. The result of this trust development process was high LMX quality. In other words, member performance and competence appear to be important predictors in the LMX development process as these are helpful behaviors in establishing trustworthiness.

In a more recent study, Nahrgang et al. (2009) examined MBA student led undergraduate teams, surveying them multiple times in the relationship development process. This study showed that early predictors of LMX quality were different from later predictors. In the earliest stages, member personality traits (extraversion and agreeableness) were predictors of LMX. In later stages, member performance emerged as a more important predictor. It seems that factors that are more influential in the first few days are different from factors that are more influential as weeks pass and members

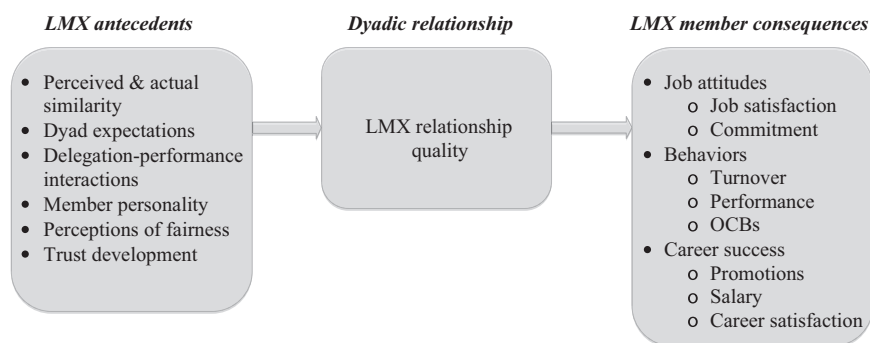


Figure 1 Summary of the antecedents and consequences of LMX relationships. LMX, leader-member exchange; OCBs, organizational citizenship behaviors.

have the opportunity to display their competence and effectiveness.

In addition to member performance and similarity to leaders, member personality has been frequently examined as a predictor in cross-sectional work. Meta-analytic results (Dulebohn et al., 2012) revealed that following member competence and perceived similarity, member positive affectivity and the locus of control are the characteristics with the strongest correlations to LMX quality. Furthermore, goal orientation has been explored as an antecedent. Mastery orientation, which refers to the degree to which a person is interested in acquiring new skills, improving and learning, has been shown to be positively related to LMX quality, whereas performance orientation, which refers to the degree to which the person is preoccupied with looking like a high performer and being evaluated well, has been negatively related (Janssen and van Yperen, 2004).

Leader–member actual similarity (as opposed to perceived similarity) has been explored as a predictor, and only recently researchers started identifying patterns of relationships. Zhang et al. (2012) showed, using polynomial regression, that leader and member similarity in proactive personality was related to LMX quality. Furthermore, the direction of the dissimilarity also mattered: When leaders had higher proactive personality compared to members, dissimilarity was much more detrimental.

While performance and competence are important currencies of exchange helping build trust, newcomers react positively to manager behaviors that communicate manager support of the newcomer. For example, in a study of newcomers in tele-marketing organizations, Sluss and Thompson (2012) found that how supervisors socialized newcomers in the form of providing advice, role modeling, and guidance were associated with higher LMX quality.

Among leader behaviors associated with LMX quality, perhaps the most consistent is leader fairness. Masterson et al. (2000) showed that interactional justice, or a sense of treatment with dignity and respect was associated with LMX quality. This study and others (e.g., Erdogan et al., 2006) contended that leader fairness would relate to LMX quality whereas organizational fairness such as procedural justice would relate to the quality of the exchange relationship with the organization in general. Recent meta-analytic evidence is not supportive of this distinction: Colquitt et al. (2013) showed that supervisor-focused and organization-focused justice perceptions did not differ in their strength of relationship with LMX quality. In other words, even when researchers make an effort to measure organizational justice perceptions, it is likely that supervisors are regarded as at least partially responsible for the observed state of affairs, resulting in higher LMX.

Once established, how stable are LMX relationships? This is an underinvestigated but important research question. Longitudinal research (e.g., Liden et al., 1993) indicates that LMX relationships start being developed very early in the relationship (within the first days and weeks) and show remarkable stability (Liden et al., 1993). One potential reason for this is that once a relationship is categorized as high or low trust, individuals interpret later events and actions using that lens and the relationship does not change dramatically. Shapiro et al. (2011) explored the effects of leader transgressions on

subsequent relationship quality and the likelihood of members to engage in punitive actions following such transgressions. The results showed that leaders in high-quality exchanges with their members had substantial levels of idiosyncrasy credits, leading to lesser likelihood of punitive action toward leaders who engage in potentially trust-violating behaviors. High-quality relations may afford dyad members higher capacity to forgive their exchange partner.

Consequences of High-Quality Relationships

Job attitudes are among the most frequently studied outcomes of LMX quality. Meta-analytic evidence (Dulebohn et al., 2012; Gerstner and Day, 1997) showed that job satisfaction, organizational commitment, and turnover intentions are consistently correlated with LMX quality. The relationship between LMX quality and actual turnover has been more inconsistent, with simple correlations close to zero (Gerstner and Day, 1997). A contextual approach has proven helpful in understanding this relationship. For example, Bauer et al. (2006) showed that in a sample of new high-level pharmaceutical executives, the LMX to turnover relationship was contingent on the extraversion level of the new executive, with LMX mattering only for the turnover behavior of employees who were relatively lower in extraversion.

High LMX members also demonstrate more desirable behaviors. The relationship between LMX and behaviors such as task performance and citizenship behaviors has been well documented (Dulebohn et al., 2012; Gerstner and Day, 1997; Ilies et al., 2007). Furthermore, high LMX members demonstrate behaviors that are desirable within the particular organizational context. For example, Hofmann et al. (2003) showed that LMX quality was positively related to safety citizenship behaviors (such as being proactive about removing safety hazards) when safety climate in the organization is high. In other words, high LMX members tend to ‘fit the mold’ and demonstrate behaviors that are desirable within that context.

LMX quality has been associated with career success. Wayne et al. (1999) showed relations with supervisor ratings of promotability, actual salary progression, and career satisfaction for those who have a high-quality LMX. High LMX members tend to be more successful. This is probably due to at least two mechanisms. High LMX members tend to have higher levels of performance ratings, and given that these ratings are obtained from supervisors, such a relationship is not surprising. Furthermore, high LMX members may be ‘sponsored’ to a greater degree by their managers. By introducing the member to influential others, giving guidance about how to advance, or informing high LMX members of impactful and visible opportunities within the organization, managers may play an important role in the career success of high LMX members. Of course, such sponsorship is also contingent on the degree to which the leader is in a position to provide these benefits. For example, Sparrowe and Liden (2005) showed that LMX quality was positively related to member emergence as a central actor in the work group advice network. However, this relationship was contingent on the degree to which the leader was central in the advice network among leaders.

LMX quality has effects that go beyond the leader-member dyad. For example, researchers have explored the relationship between the leader's LMX quality with his/her own boss, and its implications for the employees the leader supervises. The relationship between leaders and their own bosses is referred to as the leader-leader exchange (LLX) and it has been demonstrated that leaders with high LLX are in a better position to develop high-quality exchanges with their subordinates (Venkataramani et al., 2010). Leaders with high LLX have also been shown to provide higher levels of empowerment for their own members (Zhou et al., 2012). This could be a result of learning where leaders observe how to build effective relations from their own managers and model the same behaviors to their subordinates, or it could be because high LLX puts managers in a better position to provide valuable resources to their own lower-level exchange partners.

When Do High-Quality Relationships Matter the Most?

LMX seems to be more important, more influential, and more impactful for some members as opposed to others. Factors that increase the importance of LMX quality include introversion (Bauer et al., 2006), and low levels of person-organization fit or value congruence (Erdogan et al., 2004). These moderators suggest that some employees may need and value the benefits associated with high-quality LMXs more than others. The absence of high LMX quality can also be dealt with through structural mechanisms. For example, one of the key benefits associated with high LMX is high empowerment (Dulebohn et al., 2012). Perhaps for this reason, research examining negotiated special deals between employees and organizations (termed idiosyncratic deals, or i-deals) has shown that such deals were most strongly related to desirable organizational behaviors for employees with low LMX quality. This is likely because high LMX members are given more flexibility and autonomy, and structural arrangements make more difference for employees who are not in a position to receive these benefits.

Furthermore, some leaders are simply more powerful, more resourceful, and better positioned, allowing them to provide more meaningful benefits to their high LMX members. In other words, not all LMX relationships are created equal because no two dyadic partners are the same. When people feel that the leader embodies the organization (due to being in a high-level position or being in a position of authority), LMX quality is more positively related to attachment to the organization (Eisenberger et al., 2010). Similarly, when managers perceive greater levels of support from the organization (Erdogan and Enders, 2007), the effects of LMX quality for employee job attitudes and performance are greater.

Is LMX quality more important in some cultures compared to others? Studies of LMX have been conducted around the world, including collectivistic and power-distant cultures. Rockstuhl et al. (2012) conducted a meta-analysis comparing the pattern of relations between LMX, job attitudes, and behaviors around the world. Their results suggested that in horizontal-individualistic (i.e., Western) cultures, the relations between LMX, citizenship behaviors, trust in leader, and justice perceptions were stronger compared to that in vertical-collectivist

(e.g., Asian) cultures. At the same time, there were no significant differences among correlations between LMX, commitment, and job performance. Even when such differences existed, they were modest. For example, the largest difference in correlations was between LMX and distributive justice, which was 0.46 vs 0.30. While the difference is statically significant, even in collectivistic cultures LMX seems to be meaningfully associated with and explain substantial variation in employee attitudes and behaviors.

Emerging Issues: LMX Differentiation and Relative LMX

In the recent years, the focus of LMX theory started including the implications of differentiated exchanges. In fact, the distinctiveness of LMX theory from other leader behavior theories resides in its recognition that leadership varies across dyads, and within the same work group there will be variation in the quality of exchanges managers develop with their different employees. However, the majority of LMX studies in the past four decades focused on understanding antecedents, consequences, and moderators of these relationships at the individual level.

Recently, LMX differentiation started becoming the focus of LMX studies. LMX differentiation refers to the degree to which the quality of LMXs within the work group varies. Oftentimes, LMX differentiation is operationalized using the standard deviation of LMXs within the work group, with the provision that the response rate within the group is high (60% is a frequently used cutoff point for response rates; for example, Liden et al., 2006). Liden et al. (2006) showed that LMX differentiation is positively related to group performance to the degree to which members report high task interdependence and their LMX median in the group is low. The argument Liden et al. made was that LMX differentiation may be beneficial to members given that it will ensure an appropriate role differentiation. At the same time, subsequently scholars recognized the potential downsides of LMX differentiation in the form of poorer-quality job attitudes, higher levels of conflict, and lower well-being (Hooper and Martin, 2008).

The importance of LMX differentiation studies is the understanding that employees are aware of each others' LMX quality with the manager. Further, dissimilarity in LMX quality within the work group has negative consequences for members. For example, Sherony and Green (2002) showed that among pairs of coworkers, the interaction of the two LMXs was related to the quality of the relationship between coworkers. In other words, when LMX quality of one coworker diverged from the other, coworker-coworker exchanges were negatively affected. By the same token, variation within the work group is thought to be associated with negative outcomes for members as well as groups, because LMX differentiation tends to indicate that some members do not have a high-quality exchange with the leader, potentially resulting in envy, differences in resource distributions, even potential for feelings of favoritism. Low LMX differentiation is a more inclusive leadership style (provided that the mean level of LMX is high within the group) and such inclusiveness contributes to retention, particularly in diverse work groups (Nishii and Mayer, 2009).

It is important to note that the presence of LMX differentiation increases the salience of fairness concerns. [Erdogan and Bauer \(2010\)](#) showed that the effects of LMX differentiation on work attitudes, coworker relations, and retention within the work group were contingent on the fairness climate that existed in the group such that, LMX differentiation had negative effects on outcomes only when fairness climate was low.

Studies on LMX differentiation highlight the importance of employee awareness of how LMXs are distributed within the group. Employees react not only to their own relationship quality, but also to their coworkers' relationship quality, and distribution of LMXs matter. Taking this idea a step further, scholars also started investigating social comparison processes directly, by introducing the concept of relative LMX. Relative LMX is a statistical computation of the degree to which a person's LMX quality is higher or lower than the team's LMX average. Utilizing a social comparison approach, scholars argued that having a higher-quality exchange compared to one's team members is a source of satisfaction. Controlling for one's LMX quality, relative LMX is positively related to self-efficacy, performance, citizenship behaviors ([Hu and Liden, 2013](#)), and psychological contract fulfillment ([Henderson et al., 2008](#)).

In addition to examining relative LMX operationalized as the difference between focal person's LMX score from the group mean, researchers developed a perceptual measure of relative LMX, directly asking individuals to compare their own relationship quality to the other relations the leader develops with team members. [Vidyarthi et al. \(2010\)](#) found that this perception (labeled as LMX social comparisons) explained variation in performance and citizenship behaviors controlling for LMX and relative LMX, again indicating the importance of LMX distribution on member behaviors.

It seems that such interpersonal comparisons among coworkers necessitate explicit attention to the context of a focal LMX relationship. Other LMXs, including a leader's LMX quality with a superior, one's coworkers' LMX, the nature of LMX distribution within the work group and how much diversity exists in LMX quality, how one's LMX compares to one's team members (in actuality and perceptually) are all increasingly well studied constructs gaining research attention. We predict that these areas will witness further research activity.

Future Research Opportunities and Directions

Investigations of the nomological network of LMX quality are numerous and this is a mature field of investigation. Yet, there are still research avenues that are important to investigate. One issue is the evolving nature of organizations. LMX theory originated in the 1970s, at a time organizations were characterized by tall hierarchies, unity of command, and authority concentrated more at the top. Today, while such organizations continue to exist, there are more novel and contemporary structures under which managers and employees develop relationships. For example, in many contemporary organizations, employees may report to more than one manager, whereas LMX theory is based on the assumption that each member has one, clearly identifiable manager who controls resources valued by the member.

Recent research ([Vidyarthi et al., 2014](#)) has examined LMX relationships in such a context and showed that in a sample of information technology consultants reporting to two managers, convergence of the quality of these relationships was associated with more positive outcomes. The authors contended that each LMX relationship would serve as a comparison point for the other relationship, evoking social comparison processes. In other words, similar to the comparisons employees engage in with their coworkers' LMXs, it seems that they also compare the multiple exchanges they have with different leaders in their work lives. Such findings indicate that LMX theory would benefit from an extension and testing of the theory in settings that are different from the traditional organizational forms. As organizations introduce matrix structures where members report to multiple leaders for finite periods of time, or when they eliminate managers by introducing lattice organizations where there are no assigned leaders, the utility of the theory remains unclear. Extension of LMX theory to contemporary organizational structures is an important future direction.

A second research direction relates to an examination of LMX quality in relation to coworker relationships. We know that LMX quality is associated with positive job attitudes and behaviors. However, we know significantly less about when and why coworkers experience envy or jealousy, or feel negatively toward high LMX members. Are high LMX members more sought after among coworkers because they are a liaison to the manager? Or are they shunned and avoided because they are regarded as teacher's pets? When does each happen? [Erdogan et al. \(in press\)](#) showed that the degree to which LMX quality is positively associated with one aspect of coworker relations (advice network centrality) is contingent on the degree to which high LMX members also demonstrate helpfulness and discretion. Systematic investigation of the effects of LMX quality on coworker emotions, behaviors, and reactions to the focal person is a noteworthy area of research. The importance of this topic is also evidenced by the fact that the most recent meta-analysis in LMX theory ([Dulebohn et al., 2012](#)) includes relationships of LMX to a large number of outcomes, but any indicators of coworker relationships is curiously missing, which likely indicates the small number of studies examining LMX quality in relation to coworker relations.

Finally, an interesting, but underinvestigated, research topic is whether high LMX quality is uniformly desirable or whether it may have a dark side for the dyad members or the organization. The vast majority of the literature focuses on how high LMX quality contributes to individually and organizationally desirable outcomes such as job attitudes, behaviors, and work-related well-being. Yet, is it possible that there are potential downsides to having a high-quality exchange with a manager? Under what situations such negative repercussions would emerge? The only example of a potential 'dark side' to LMX was revealed by [Ballinger et al. \(2010\)](#). In their investigation of employees working in veterinary hospitals, they showed that while LMX quality was negatively related to actual turnover, following leader turnover high LMX members demonstrated increased probability to leave. In other words, one interesting and important downside of high LMX relationships is that when they leave, they may take those close to them with them.

Identifying and understanding any potential downsides to LMX quality remain important to fully understand how this theory can be utilized to increase leadership effectiveness in the workplace.

Conclusion

In conclusion, while research on LMX has entered a mature phase where much is known about its measurement, antecedents, boundary conditions, and consequences, much also remains left to uncover. In this article, we summarized what is known but also highlighted avenues for future research. These include future understanding of how LMX relationships develop and the boundary conditions for relationship development, how LMX is measured, how relative LMX affects what we know, as well as the key future research themes of the changing nature of work in terms of content and organizational structures, the influence of the social network of relationships, as well as the dark side of LMX. Given these and other potential research questions, we are excited about the future of LMX as a vibrant research area.

See also: Authentic Leadership; Job Satisfaction; Organizational Commitment; Psychological Contracts; Supervision, Abusive.

Bibliography

- Ballinger, G.A., Lehman, D.W., Schoorman, F.D., 2010. Leader-member exchange and turnover before and after succession events. *Organizational Behavior and Human Decision Processes* 113, 25–36.
- Bauer, T.N., Erdogan, B., Liden, R.C., Wayne, S.J., 2006. A longitudinal study of the moderating role of extraversion: leader-member exchange, performance, and turnover during new executive development. *Journal of Applied Psychology* 91, 298–310.
- Bauer, T.N., Green, S.G., 1996. Development of leader-member exchange: a longitudinal test. *Academy of Management Journal* 39, 1538–1567.
- Colquitt, J.A., Scott, B.A., Rodell, J.B., Long, D.M., Zapata, C.P., Conlon, D.E., Wesson, M., 2013. Justice at the millennium, a decade later: a meta-analytic test of social exchange and affect-based perspectives. *Journal of Applied Psychology* 98, 199–236.
- Dienesch, R.M., Liden, R.C., 1986. Leader-member exchange model of leadership: a critique and further development. *Academy of Management Review* 11, 618–634.
- Dulac, T., Coyle-Shapiro, J.A.M., Henderson, D.J., Wayne, S.J., 2008. Not all responses to breach are the same: the interconnection of social exchange and psychological contract processes in organization. *Academy of Management Journal* 51, 1079–1098.
- Dulebohn, J.H., Bommer, W.H., Liden, R.C., Brouer, R.L., Ferris, G.R., 2012. A meta-analysis of antecedents and consequences of leader-member exchange: integrating the past with an eye toward the future. *Journal of Management* 38, 1715–1759.
- Eisenberger, R., Karagonlar, G., Stinglhamber, F., Neves, P., Becker, T.E., Gonzalez-Morales, M.G., Steiger-Mueller, M., 2010. Leader-member exchange and affective organizational commitment: the contribution of supervisor's organizational embodiment. *Journal of Applied Psychology* 95, 1085–1103.
- Erdogan, B., Bauer, T.N., 2010. Differentiated leader-member exchanges (LMX): the buffering role of justice climate. *Journal of Applied Psychology* 95, 1104–1120.
- Erdogan, B., Bauer, T.N., Walter, J., Deeds that help and words that hurt: helping and gossip as moderators of the relationship between LMX and advice network centrality. *Personnel Psychology*, in press.
- Erdogan, B., Enders, J., 2007. Support from the top: supervisors' perceived organizational support as a moderator of leader-member exchange to satisfaction and performance relationships. *Journal of Applied Psychology* 92, 321–330.
- Erdogan, B., Kraimer, M.L., Liden, R.C., 2004. Work value congruence and intrinsic career success: the compensatory roles of leader-member exchange and perceived organizational support. *Personnel Psychology* 57, 305–332.
- Erdogan, B., Liden, R.C., Kraimer, M.L., 2006. Justice and leader-member exchange: the moderating role of organizational culture. *Academy of Management Journal* 49, 395–406.
- Gerstner, C.R., Day, D.V., 1997. Meta-analytic review of leader-member exchange theory: correlates and construct issues. *Journal of Applied Psychology* 82, 827–844.
- Henderson, D.J., Wayne, S.J., Shore, L.M., Bommer, W.H., Tetrick, L.E., 2008. Leader-member exchange: differentiation, and psychological contract fulfillment: a multilevel examination. *Journal of Applied Psychology* 93, 1208–1219.
- Hiller, N.J., DeChurch, L.A., Murase, T., Doty, D., 2011. Searching for outcomes of leadership: a 25-year review. *Journal of Management* 37, 1137–1177.
- Hofmann, D.A., Morgeson, F.P., Gerras, S.J., 2003. Climate as a moderator of the relationship between leader-member exchange and content specific citizenship: safety climate as an exemplar. *Journal of Applied Psychology* 88, 170–178.
- Hooper, D.T., Martin, R., 2008. Beyond personal leader-member exchange (LMX) quality: the effects of perceived LMX variability on employee reactions. *Leadership Quarterly* 19, 20–30.
- Hu, J., Liden, R.C., 2013. Relative leader-member exchange within team contexts: how and when social comparison impacts individual effectiveness. *Personnel Psychology* 66, 127–172.
- Ilies, R., Nahrgang, J.D., Morgeson, F.P., 2007. Leader-member exchange and citizenship behaviors: a meta-analysis. *Journal of Applied Psychology* 92, 269–277.
- Janssen, O., van Yperen, N.W., 2004. Employees' goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction. *Academy of Management Journal* 47, 368–384.
- Liden, R.C., Erdogan, B., Wayne, S.J., Sparrowe, R.T., 2006. Leader-member exchange, differentiation, and task interdependence: implications for individual and group performance. *Journal of Organizational Behavior* 27, 723–746.
- Liden, R.C., Graen, G., 1980. Generalizability of the vertical dyad linkage model of leadership. *Academy of Management Journal* 23, 451–465.
- Liden, R.C., Maslyn, J.M., 1998. Multidimensionality of leader-member exchange: an empirical assessment through scale development. *Journal of Management* 24, 43–72.
- Liden, R.C., Wayne, S.J., Stilwell, D., 1993. A longitudinal study on the early development of leader-member exchanges. *Journal of Applied Psychology* 78, 662–674.
- Masterson, S.S., Lewis, K., Goldman, B.M., Taylor, M.S., 2000. Integrating justice and social exchange: the differing effects of fair procedures and treatment on work relationships. *Academy of Management Journal* 43, 738–748.
- Nahrgang, J.D., Morgeson, F.P., Ilies, R., 2009. The development of leader-member exchanges: exploring how personality and performance influence leader and member relationships over time. *Organizational Behavior and Human Decision Processes* 108, 256–266.
- Nishii, L.H., Mayer, D.M., 2009. Do inclusive leaders help to reduce turnover in diverse groups? The moderating role of leader-member exchange in the diversity to turnover relationship. *Journal of Applied Psychology* 94, 1412–1426.
- Rockstuhl, T., Dulebohn, J.H., Ang, S., Shore, L.M., 2012. Leader-member exchange (LMX) and culture: a meta-analysis of correlates of LMX across 23 countries. *Journal of Applied Psychology* 97, 1097–1130.
- Scandura, T.A., Graen, G.B., 1984. Moderating effects of initial leader-member exchange status on the effects of a leadership intervention. *Journal of Applied Psychology* 69, 428–436.
- Shapiro, D.L., Boss, A.D., Salas, S., Tangirala, S., Von Glinow, M.A., 2011. When are transgressing leaders punitively judged? An empirical test. *Journal of Applied Psychology* 96, 412–422.
- Sherony, K.M., Green, S.G., 2002. Coworker exchange: relationships between coworkers, leader-member exchange, and work attitudes. *Journal of Applied Psychology* 87, 542–548.
- Sin, H.P., Nahrgang, J.D., Morgeson, F.P., 2009. Understanding why they don't see eye to eye: an examination of leader-member exchange (LMX) agreement. *Journal of Applied Psychology* 94, 1048–1057.
- Sluss, D.M., Thompson, B.S., 2012. Socializing the newcomer: the mediating role of leader-member exchange. *Organizational Behavior and Human Decision Processes* 119, 114–125.
- Sparrowe, R.T., Liden, R.C., 2005. Two routes to influence: integrating leader-member exchange and network perspectives. *Administrative Science Quarterly* 50, 505–535.

- Venkataramani, V., Green, S.G., Schleicher, D.J., 2010. Well-connected leaders: the impact of leaders' social network ties on LMX and members' work attitudes. *Journal of Applied Psychology* 95, 1071–1084.
- Vidyarathi, P., Erdogan, B., Anand, S., Liden, R.C., Chaudhry, A., 2014. One member, two leaders: extending leader-member exchange theory to a dual leadership context. *Journal of Applied Psychology* 99, 468–483.
- Vidyarathi, P.R., Liden, R.C., Anand, S., Erdogan, B., Ghosh, S., 2010. Where do I stand? Examining the effects of leader-member exchange social comparison on employee work behaviors. *Journal of Applied Psychology* 95, 849–861.
- Walumbwa, F.O., Mayer, D.M., Wang, P., Wang, H., Workman, K., Christensen, A.L., 2011. Linking ethical leadership to employee performance: the roles of leader-member exchange, self-efficacy, and organizational identification. *Organizational Behavior and Human Decision Processes* 115, 204–213.
- Wang, H., Law, K.S., Hackett, R.D., Wang, D., Chen, Z.X., 2005. Leader-member exchange as a mediator of the relationship between transformational leadership and followers' performance and organizational citizenship behavior. *Academy of Management Journal* 48, 420–432.
- Wayne, S.J., Liden, R.C., Kraimer, M.L., Graf, I.K., 1999. The role of human capital, motivation and supervisor sponsorship in predicting career success. *Journal of Organizational Behavior* 20, 577–595.
- Zhang, Z., Wang, M., Shi, J., 2012. Leader-follower congruence in proactive personality and work outcomes: the mediating role of leader-member exchange. *Academy of Management Journal* 55, 111–130.
- Zhou, L., Wang, M., Chen, G., Shi, J., 2012. Supervisors' upward exchange relationships and subordinate outcomes: testing the multilevel mediation role of empowerment. *Journal of Applied Psychology* 97, 668–680.