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# Leader-Member Exchange and Performance: Where We Are and Where We Go From Here a

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## **Abstract and Keywords**

This chapter provides a critical and integrative review of leader-member exchange (LMX) as a predictor of four similar but different performance outcomes: task performance, affiliative extra-role behavior, change-oriented extra-role behavior, and adaptive performance. Looking to the past, the authors review this existing literature with a particular emphasis on identifying both mechanisms and boundaries to these relationships. This review suggests that high-quality LMX relationships are generally beneficial to performance whereas low-quality LMX relationships are generally detrimental to performance. Looking to the future, the authors propose that researchers can contribute to the LMX-to-performance literature by focusing on the boundaries of this relationship. Specifically, the authors recommend examining both the conditions under which high LMX may harm performance, as well as the conditions under which low LMX may not harm performance. The authors further consider the topics of supervisor-employee LMX congruence, time, and individual differences in altering the LMX-to-performance relationship.

Keywords: leader-member exchange, performance, task performance, organizational citizenship behavior, extrarole behavior, affiliative behavior, change-oriented behavior, voice, contextual performance, adaptive performance

# Introduction

The leader-member exchange (LMX)-to-performance link is critically important to the LMX domain due to the implications that performance has for employees, leaders, and organizations. "Job performance is the most widely studied criterion variable in the organizational behavior and human resource management literatures" (Bommer,

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Johnson, Rich, Podsakoff, & Mackenzie, 1995, p. 587), and the relationship between LMX and performance is one of the most heavily researched topics in the LMX literature—as evidenced by the number of independent samples for performance variables included in LMX meta-analyses (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012; Gerstner & Day, 1997).

Despite the importance of the LMX-to-performance link, there has been no systematic review of the LMX-to-performance literature. This is problematic because a single metaanalytic effect size cannot capture the complexity of a literature (Aguinis, Pierce, Bosco, Dalton, & Dalton, 2011). Further, the LMX-to-performance link is particularly complex because job performance is a multidimensional construct (Campbell, 1990) that has continued to evolve with the changing demands of the workplace (Ilgen & Pulakos, 1999). Thus, the goals of this manuscript are to provide a systematic and critical review of the LMX-to-performance literature and to make recommendations for future research based on our analysis of the literature.

(p. 158) We begin by defining performance and comparing four similar but different types of performance: task performance, affiliative extra-role behavior, change-oriented extrarole behavior, and adaptive performance. We then review the LMX literature predicting each type of performance. Specifically, we review the literature that establishes the baseline LMX-to-performance relationships, the literature that elucidates why LMX affects performance by considering mediators of the linkage, and we discuss the roles of employee, leader, and contextual boundary conditions by discussing moderators of the linkage. After our review, we briefly discuss patterns in prior research and recommend the value of future research in five specific areas.

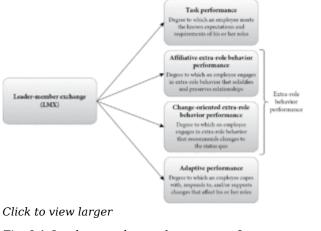
# **Defining Performance**

The conceptualization of performance and how it is studied has evolved dramatically over the past half century. Traditionally, performance was understood and assessed in terms of task proficiency—performance on tasks specified in the job description. However, advances over the past 50 years have provided a more comprehensive view of the performance phenomenon by identifying a range of behaviors that contribute to organizational effectiveness but are not captured by task performance (Campbell, McCloy, Oppler, & Sager, 1993). Examples of new performance constructs include organizational citizenship behavior (Organ, 1988; Smith, Organ, & Near, 1983), extra-role behavior (Van Dyne, Cummings, & McLean Parks, 1995), contextual performance (Borman & Motowidlo, 1993), adaptive performance (Pulakos, Arad, Donovan, & Plamondon, 2000), prosocial organizational behavior (Brief & Motowidlo, 1986), voice

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(Van Dyne & LePine, 1998), whistle-blowing (Miceli & Near, 1984), and proactive behavior (Crant, 2000).



*Fig. 9.1* Leader-member exchange-to-performance framework.

As described by Rotundo and Sackett (2002) as well as Griffin, Neal, and Parker (2007), there is partial overlap among many of these constructs, and therefore it is important to describe the theoretical basis for differentiating and integrating the various constructs that make up performance. Given that we are providing an

integrative review of the LMX-to-performance relationship and performance is a multidimensional construct (Campbell, 1990), we first provide an organizing framework of four similar but distinct types of performance that we will use to organize our review of existing literature on the LMX-to-performance link (see Figure 9.1). This framework is adapted from the performance frameworks introduced by Johnson (2003), Griffin and colleagues (2007), and Van Dyne and colleagues (1995).

The first type of performance included in our framework linking LMX to performance is task (p. 159) performance. Task performance is the degree to which an employee meets the known expectations and requirements of the role (Campbell et al., 1993). We include task performance as one of the four key performance outcomes because (a) it is the traditional focus of research on performance (Griffin et al., 2007), (b) it is the primary focus of research on LMX and performance (e.g., Dansereau, Graen, & Haga, 1975; Graen, Novak, & Sommerkamp, 1982; Liden & Graen, 1980; Vecchio & Gobdel, 1984), and (c) it is one of the most heavily researched behavioral outcomes in the LMX literature (Dulebohn et al., 2012; Gerstner & Day, 1997).

The second type of performance included in our framework that links LMX to performance is affiliative extra-role behavior. Affiliative extra-role behavior is the degree to which an employee engages in discretionary behaviors that go beyond delineated role expectations and aim to solidify and preserve relationships as well as benefit the organization (Van Dyne et al., 1995). Affiliative extra-role behaviors are important to our review because many of the core behavioral outcomes in the LMX literature involve

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solidifying and preserving relationships. This includes the relationships of LMX with organizational citizenship behavior (e.g., Ilies, Nahrgang, & Morgeson, 2007), helping (e.g., Van Dyne, Kamdar, & Joireman, 2008), altruism (e.g., Wayne & Green, 1993), contextual performance (e.g., Kraimer, Wayne, & Jaworski, 2001), safety-related citizenship (e.g., Hofmann, Morgeson, & Gerras, 2003), prosocial behavior (e.g., Pearson & Marler, 2010), and stewardship behavior (e.g., Kulkarni & Ramamoorthy, 2011).

The third type of performance included in our framework is change-oriented extra-role behavior. Change-oriented extra-role behavior is the degree to which an employee engages in discretionary behaviors that recommend changes to the status quo, go beyond delineated role expectations, and aim to benefit the organization (Van Dyne et al., 1995). We distinguish change-oriented extra-role behavior from affiliative extra-role behavior in our review because research has demonstrated differential relations for LMX with these two forms of extra-role behavior (Van Dyne et al., 2008). Examples of research on LMX and change-oriented behavior include the relationships between LMX and constructive deviance (e.g., Vadera, Pratt, & Mishra, 2013), voice (e.g., Burris, Detert, & Chiaburu, 2008), change-oriented behavior (e.g., Vigoda-Gadot & Beeri, 2012), whistle blowing (e.g., Bhal & Dadhich, 2011), and employee resistance (e.g., Tepper et al., 2006).

The fourth and final type of performance in our framework linking LMX to performance is adaptive performance. Adaptive performance is the degree to which an employee copes with, responds to, and/or supports changes that affect their roles (Pulakos et al., 2000). We include adaptive performance based on the growing need for adaptivity in the changing and dynamic environments facing today's organizations (Ilgen & Pulakos, 1999). Our review of the literature focused on the eight dimensions of adaptive performance discussed by Pulakos and colleagues (2000): handling emergencies, handling work stress, creativity, dealing with uncertain situations, learning, interpersonal adaptability, cultural adaptability, and physical adaptability. Examples in the LMX literature include the relationships of LMX with expatriate performance (e.g., Pattie, Benson, Casper, & McMahan, 2013), expatriate success (e.g., Benson & Pattie, 2009), adaptive selling behaviors (e.g., Paparoidamis & Guenzi, 2009), creative performance (e.g., Tierney, Farmer, & Graen, 1999), innovative behavior (e.g., Scott & Bruce, 1994), and voluntary learning behavior (Walumbwa, Cropanzano, & Hartnell, 2009).

Now that we have defined these four types of performance, we review the literature on LMX and each type of performance in more detail. We start with task performance.

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# LMX and Task Performance

### **Establishing the Relationship**

Early research in the organizational sciences focused on task performance instead of the broader conceptualizations of performance that are widely accepted today. Similarly, the LMX literature initially focused on task performance (i.e., task proficiency). The first two studies to demonstrate a relationship between LMX and performance were those of Dansereau and colleagues (1975) and Liden and Graen (1980). In each of these studies, results demonstrated that LMX was positively associated with supervisor-appraised performance (i.e., subjective performance) for leader-member dyads in university service departments. This initial evidence, however, operationalized performance from the leader's point of view, indicating the need to consider other operationalizations of performance (Dienesch & Liden, 1986).

Going beyond these initial studies, Graen and colleagues (1982) established the positive association between LMX and objective performance, measured (p. 160) by collecting weekly output records, in a field experiment involving administrative employees in a public service organization. Vecchio and Gobdel (1984) demonstrated a positive relationship between LMX and subjective as well as objective performance in a mediumsized, multiple-branch bank. Deluga (1998) further extended the LMX-performance link beyond subordinate performance and demonstrated a positive relationship between LMX and supervisor performance) using a sample of employees across a diverse array of organizational settings. In sum, the positive association of LMX with both subjective and objective task performance is well established and also substantiated by meta-analytic estimates (Dulebohn et al., 2012; Gerstner & Day, 1997).

Researchers have also examined more complex relationships and have considered the relative effects of different leadership approaches simultaneously. For example, Howell and Hall-Merenda (1999) simultaneously considered the effects of transformational leadership, contingent reward leadership, active management by exception, passive management by exception, and LMX on subordinate performance. Results showed that, when considered simultaneously, only active management by exception and LMX were positively associated with subordinate performance. Surprisingly, transformational leadership was not associated with subordinate performance after accounting for the effects of the other leadership approaches. Furthermore, results demonstrated that LMX

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was the only leadership approach that was not moderated by physical distance, further confirming the power of LMX as a predictor of task performance.

Researchers have also considered the relative effects of LMX in comparison with other forms of social exchange such as perceived organizational support. For example, Settoon, Bennett, and Liden (1996) demonstrated that LMX was a stronger predictor of task performance and organizational citizenship behavior (OCB), while perceived organizational support was a stronger predictor of organizational commitment. Wayne, Shore, and Liden (1997) demonstrated that LMX was related to leader-related outcomes (performance, doing favors, and OCB that benefits leaders), whereas perceived organizational support predicted organization-related outcomes (affective commitment, intentions to quit, and OCB that benefits the organization). In sum, evidence comparing social exchange mechanisms suggests that LMX is a key driver of task performance.

Finally, research also shows that LMX mediates the effects of more distal predictors on task performance. For example, Masterson, Lewis, Goldman, and Taylor (2000) showed that *interactional justice* influenced supervisor-rated task performance via LMX, using a sample of university employees. Janssen and Van Yperen (2004) demonstrated that LMX mediated the relationships of *mastery orientation* with leader-rated performance and innovative performance in a Dutch energy supplier. Wang, Law, Hackett, Wang, and Chen (2005) showed that LMX mediated the positive effect of *transformational leadership* on task performance across multiple organizations in China. Xu, Huang, Lam, and Miao (2012) demonstrated that LMX mediated the negative relationship between *abusive supervision* and task performance in a Fortune 500 telecommunications firm in China. Finally, Zhang, Wang, and Shi (2012) showed that LMX mediated the effect of *proactive personality congruence* (between employees and leaders) on performance for service employees in a Chinese bank.

Having described these LMX-to-task performance relationships, we now focus on reasons why LMX positively influences task performance. The next section reviews mediators that help to explain the LMX-to-task performance relationship.

### Key Mediators of the LMX-to-Task Performance Relationship

First, we consider studies that predicted and demonstrated mediating effects for single mediators: supervisor liking, employee empowerment, and negative feedback seeking. Then we describe a study that tested three mediators (commitment to the supervisor, self-efficacy, and means efficacy) based on social exchange and efficacy theories.

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### Supervisor Liking.

Judge and Ferris (1993) posited that "supervisors who have a close working relationship with certain subordinates in terms of the frequency and quality of their day-to-day interactions will be more likely to like those subordinates than others" (p. 87). Thus, highquality supervisor-subordinate relationships cause supervisors to like some subordinates more than others, with subsequent effects on supervisor ratings of employee performance. Results in a sample of nurses supported these arguments and established *supervisor liking* as a mediator that links LMX with supervisor-appraised performance (i.e., subjective performance).

#### **Empowerment.**

Shifting from a supervisor- focused mediator to an employee-focused mediator, (p. 161) G. Chen, Kirkman, Kanfer, Allen, and Rosen (2007) argued that "employees who develop better relationships with their leader (i.e., higher LMX) feel more empowered and, in turn, are more motivated to perform effectively" (p. 333). Results in stores of a Fortune 500 home improvement company supported their prediction and showed that *empowerment* mediated the LMX-to-individual performance relationship.

### Negative Feedback-Seeking.

Z. Chen, Lam, and Zhong (2007) drew on social exchange theory to argue that high LMX would predict task performance because of its effect on *negative feedback seeking*. This is because high-quality relationships involve trust and make it easier for employees to approach their supervisors with questions about their roles. Thus, they should have greater role clarity. Specifically, "[s]ubordinates who seek negative feedback can avoid the detrimental consequences of poor performance as well as misunderstandings with their supervisors because they have a better understanding of, and control over, their working behavior" (p. 204). Examination of this hypothesis with data from Chinese corporations supported the prediction and showed that negative feedback-seeking mediated the relationship between LMX and performance.

### **Multiple Mediators.**

The final study that we discuss links LMX to task performance via three mediators: *commitment to the supervisor, self-efficacy*, and *means efficacy*. Walumbwa, Cropanzano, and Goldman (2011) drew on social exchange theory (for a review of social exchange theory and LMX, see Liden, Sparrowe, & Wayne, 1997) and efficacy theory (Bandura, 1977) to predict multiple mediating mechanisms as links between LMX and performance. Results in a sample of nurses in the southwestern United States demonstrated that commitment to the supervisor, self-efficacy, and means efficacy each partially mediated the effects of LMX on performance. More importantly, they showed that commitment to

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the supervisor, self-efficacy, and means efficacy together fully mediated the positive effect of LMX on performance. In sum, using multiple theoretical perspectives and mediators, Walumbwa and colleagues (2011) provided a more complete model of multiple mechanisms that help to explain why LMX predicts task performance.

As demonstrated by the above summary, a large amount of research links LMX to task performance, and a number of studies have supported mediators that help to explain this relationship. In the next section, we discuss processes that account for boundary conditions that qualify the LMX-to-task performance relationships.

### Key Moderators of the LMX-to-Task Performance Relationship

We organize this section into three topics. First, we discuss employee characteristics, followed by leader characteristics, and then contextual characteristics.

### **Employee Characteristics.**

Employee factors play an important role in changing the nature of the LMX-to-task performance relationship. Graen and colleagues (1982) proposed and demonstrated that *employee growth need strength* moderated the link between LMX and task performance, such that the effect was stronger for those with high growth need strength in comparison to those with low growth need strength. In contrast, Bauer, Erdogan, Liden, and Wayne (2006) showed that *extraversion* buffered the relationship between LMX and task performance in a sample of executives at a Fortune 500 pharmaceutical organization. LMX was not related to performance for those high in extraversion but was positively related to performance for those low in extraversion. Finally, Sekiguchi, Burton, and Sablynski's (2008) study of employees in a Fortune 100 telecommunications company and employees from a large, international manufacturing company demonstrated that *job embeddedness* moderated the relationship between LMX and task performance. Results showed that the positive relationship was stronger when job embeddedness was high and weaker when job embeddedness was low.

### Leader Characteristics.

Leader factors also play an important role in changing the nature of the LMX-to-task performance relationship. For example, G. Chen and colleagues (2007) demonstrated that *leadership climate* moderated the positive influence of LMX on individual empowerment and ultimately task performance, such that the influence of LMX was stronger when leadership climate was more positive. Erdogan and Enders (2007) drew on social exchange theory to posit that supervisor exchanges with the organization and supervisor exchanges with subordinates are interconnected. Analysis of data from six stores in a

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grocery chain in the northwestern United States established that *supervisor perceived organizational support* enhanced the relationship between LMX and subordinate job performance. The relationship was positive when supervisor perceived organizational support was high and buffered when supervisor perceived organizational support was low. Finally, Chang and (p. 162) Johnson (2010) demonstrated that *leader relational identity* buffered the relationship between LMX and subordinate task performance in a sample across a diverse array of organizations and occupations. The relationship was positive when leader relational identity was low and buffered when relational identity was high.

#### **Contextual Factors.**

Contextual factors are the most frequently studied moderators of the LMX-to-task performance relationship. Dunegan, Duchon, and Uhl-Bien (1992) demonstrated in a sample of pathology and lab employees from a university medical center that LMX and task performance were significantly related when *task challenge* was either very high or very low but not when task challenge was moderate. Integrating social comparison, social influence, and social exchange perspectives, Takeuchi, Yun, and Wong (2011) showed that *coworker exchange ideology* moderated the LMX-to-task performance relationship, such that the positive relationship was weaker when coworkers had a strong exchange ideology and stronger when exchange ideology was weak across a diverse array of organizations and occupations. Finally, research also shows that the *duration of dyadic relationships* (Duarte, Goodson, & Klich, 1994) and *frequency of communication* (Kacmar, Witt, Zivnuska, & Gully, 2003) moderated the LMX-to-task performance link.

Now that we have reviewed studies of LMX and performance of in-role work behaviors, we consider the second most commonly researched performance outcome in the LMX domain. The next section describes research on LMX as a predictor of affiliative extra-role behavior.

# LMX and Affiliative Extra-Role Behavior

### **Establishing the Relationship**

Affiliative extra-role behavior includes helping, organizational citizenship behavior, prosocial behavior, altruism, contextual performance, stewardship behavior, and safety citizenship. Wayne and Green (1993) conducted one of the first studies to tie LMX with affiliative extra-role behavior by showing a positive association between LMX and

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altruism using data from three hospitals and a large medical clinic in the Midwest. Basu and Green (1995) extended this finding by showing that LMX predicted organizational citizenship behavior targeted at individuals as well as organizational citizenship behavior targeted at organizations with data from a manufacturing plant of a Fortune 500 printing company. Similarly, Kraimer and colleagues (2001) showed that LMX had positive effects on contextual performance in a sample of expatriates and supervisors from three USbased Fortune 500 companies. Further, Settoon and colleagues (1996) demonstrated that LMX is key social exchange mechanism driving OCB by establishing that LMX is a better predictor of organizational citizenship behavior whereas perceived organizational support is a better predictor of organizational commitment. In sum, the positive relationship between LMX and affiliative extra-role behavior is well established in the literature and is also substantiated by meta-analytic estimates (Dulebohn et al., 2012; Ilies et al., 2007).

Research also demonstrates that LMX mediates the effects of more distal predictors on affiliative extra-role behavior. For example, Hui, Law, and Chen (1999) demonstrated that LMX mediated the effect of *negative affectivity* on organizational citizenship behavior using a field sample in a Chinese joint venture. Masterson and colleagues (2000) showed that *interactional justice* influenced organizational citizenship behavior via LMX, with data from employees at a large public university. Wang and colleagues (2005) showed that LMX mediated the effect of *transformational leadership* on organizational citizenship behavior using data from multiple organizations in China. Karriker and Williams (2009) demonstrated that *agent-referenced distributive and procedural justice* influenced supervisor-targeted organizational citizenship behavior via LMX in a variety of occupations and organizations. Finally, Xu and colleagues (2012) showed that LMX mediated the effects of *abusive supervision* on organizational citizenship behavior toward the organization and organizational citizenship behavior toward individuals using data from a Fortune 500 telecommunications firm in China.

Although these studies strengthen the evidence that LMX predicts affiliative citizenship, they do not explain why LMX affects affiliative extra-role behavior. Thus, we next review research on key mediators that tie LMX to affiliative extra-role behavior.

### Mediators of the LMX-to-Affiliative Extra-Role Behavior Relationship

### Costs of Seeking Help and Help-Seeking Behavior.

Anderson and Williams (1996) noted "[a]lthough few organizational studies of helping behavior have specifically examined how the nature of the relationship between individuals is associated with helping, studies have demonstrated that (p. 163) several

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leader behaviors (supportive, participative, and contingent reward behavior) are related to subordinate helping" (p. 283). Thus, they examined underlying mechanisms linking LMX with helping. Specifically, they posited that LMX would be associated with perceptions of the *costs of seeking help*, *help seeking behavior*, and helping behavior because "one would expect that high-quality working relationships would be characterized by a mutual sense of concern for each other and a sense of responsibility for providing help when needed, and, as a result, they would provide a basis for the expectation of receiving help in return for help provided. From an exchange perspective, helping would likely be perceived as an expected part of high-quality relationships" (p. 284). Results of their study supported the perceived costs of seeking help and help seeking behavior as mediators that linked LMX and helping in a sample of nursing staff at Midwestern hospitals.

### **Commitment and Trust.**

Walumbwa and colleagues (2011) used social exchange theory and the target similarity model to posit that *commitment to the supervisor* would mediate the relationship of LMX with organizational citizenship targeted toward the organization and citizenship targeted toward the supervisor. Results in a sample of nurses in the southwestern United States supported these predictions. Wat and Shaffer (2005) demonstrated that *trust in the supervisor* mediated the relationship between LMX and citizenship in a sample of Hong Kong investment banking personnel. Similarly, Tierney, Bauer, and Potter (2002) demonstrated that *organizational commitment* mediated the effect of LMX on affiliative extra-role behavior in a sample of Mexican white-collar workers.

### **Outcome Favorability and Justice.**

Sun, Chow, Chiu, and Pan (2013) suggested that "[t]he social exchange process in the current literature is overwhelmingly articulated as exchange of social-emotional resources, overlooking similarly important and paralleling exchange of economic and social resources" (p. 216). Empirical results showed that *outcome favorability* mediated the LMX-to-organizational citizenship behavior relationship in Chinese manufacturing firms. Bhal (2006) demonstrated that other forms of justice, including *procedural and interactional justice* mediated the effects of two dimensions of LMX—contribution and affect—on citizenship behavior using data collected from software organizations in India.

Now that we have summarized key studies that shed light on why LMX predicts affiliative extra-role behavior, we now consider moderators of the LMX—affiliative extra-role behavior relationship. Specifically, we review employee-related, leader-related, and contextual boundary conditions that buffer or enhance the effects of LMX on affiliative extra-role behavior.

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# Moderators of the LMX-to-Affiliative Extra-Role Behavior Relationship

### **Employee Characteristics.**

Although some studies have demonstrated moderators of the LMX-to-affiliative extra-role behavior linkage, this research is much less abundant than that on the LMX-to-task performance linkage. Sekiguchi and colleagues (2008) demonstrated that *job embeddedness* moderated the relationship between LMX and organizational citizenship behavior, such that the relationship was stronger when job embeddedness was high and weaker when embeddedness was low, in a sample from a Fortune 100 telecommunications company and a large, international manufacturing company. Van Dyne and colleagues (2008) demonstrated that *role perceptions*—whether helping is viewed as in-role or extra-role—changed the relationship between LMX and helping. Across two international samples, results showed that viewing helping as in-role buffered the negative effect of low-quality LMX on helping. Kamdar and Van Dyne (2007) demonstrated that *personality* (i.e., *agreeableness and conscientiousness*) interacted with LMX to predict helping targeted at the supervisor. In this study of engineers in an MNC, LMX weakened the relationships between personality and helping such that high LMX buffered the detrimental effects of personality when personality was less favorable.

### Leader Characteristics.

There also is less research on moderators of the LMX-to-affiliative extra-role behavior linkage compared with research on LMX-to-task performance linkage. Chang and Johnson (2010) demonstrated that *leader relational identity* moderated the relationship between LMX and organizational citizenship behavior, such that it was stronger when subordinates had supervisors with weak relational identities. Sparrowe, Soetjipto, and Kraimer (2006) demonstrated that the effect of *leader downward influence tactics* on member's helping behavior depended on LMX quality. Downward influence tactics predicted helping behavior when LMX was high and negatively impacted helping behavior when member LMX was low, in a sample from a Midwest distribution company.

### **Contextual Factors.**

Research on contextual factors that moderate the LMX-to-affiliative extra-role behavior linkage has grown over the past decade. (p. 164) For example, Li, Liang, and Crant (2010) showed that *procedural justice climate* strengthened the indirect relationship between proactive personality and organizational citizenship behavior via LMX, in a sample from state-owned companies in China. Sun and colleagues (2013) demonstrated that *procedural justice climate* strengthened the indirect relationship between outcome

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favorability and organizational citizenship behavior via LMX, in a sample of manufacturing firms in China. Hofmann and colleagues (2003) demonstrated that the relationship between LMX and safety citizenship was moderated by *safety climate*, such that the relationship was stronger when there was a positive safety climate and weaker in negative safety climates, in a military sample. Finally, two meta-analyses demonstrated support for contextual moderators. Ilies and colleagues (2007) showed that LMX more strongly predicted *individually targeted citizenship* in comparison to *organizationally targeted citizenship*. Rockstuhl, Dulebohn, Ang, and Shore (2012) showed that the relationship between LMX and organizational citizenship behavior was stronger in *horizontal-individualistic* (e.g., Western) *contexts* in comparison to *vertical-collectivistic* (e.g., Asian) *contexts*.

Now that we have reviewed research on the relationship between LMX and performance of discretionary behavior that strengthens relationships and aims to benefit the organization, we move to a much less researched outcome of LMX. Next, we focus on LMX as a predictor of change-oriented extra-role behavior.

# LMX and Change-Oriented Extra-Role Behavior

### **Establishing the Relationship**

Change-oriented extra-role behavior includes change-oriented citizenship, voice behavior, constructive deviance, whistle-blowing, and employee resistance. Bettencourt (2004) drew on social exchange arguments to propose a positive link between LMX and change-oriented citizenship behavior. He posited that the "additional support, autonomy, information, and resources derived from such relationships stimulate risk-taking and a willingness to exceed the scope of one's formal job description" (p. 169). Results in a sample of retail associates supported this prediction. Elicker, Levy, and Hall (2006) demonstrated a positive relationship between LMX and voice within performance appraisal contexts using employees at a large petrochemical company. Tepper and colleagues (2006) linked LMX with employee resistance behaviors in two field samples and showed that refusing vs. negotiating depended on LMX. Finally, Botero and Van Dyne (2009) demonstrated that LMX was positively related to voice in the US and in Colombia.

We now move beyond main effects. In the next section, we consider research on why LMX affects change-oriented extra-role behavior and review key mediators that have been established in the literature.

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# Mediators of the LMX-to-Change-Oriented Extra-Role Behavior Relationship

### **Psychological Detachment.**

Burris and colleagues (2008) argued that "[h]igh-quality LMX relationships are associated with a variety of subordinate outcomes (e.g., performance, satisfaction, role clarity, and enlargement; Gerstner & Day, 1997) that can mitigate withdrawal and detachment cognitions ... Because these withdrawal cognitions likely in turn reduce the extent to which employees give discretionary effort on the organization's behalf (for the reasons argued above), we predict a relationship between LMX and the level of voice that is mediated by subordinate psychological detachment" (p. 915). Results in a sample of restaurants in the United States demonstrated that *psychological detachment* mediated the LMX-to-voice relationship. Interestingly, psychological attachment did not predict voice or mediate the effects of LMX on voice.

### Work-to-Family Spillover.

Liu, Kwan, and Mao (2012) drew on social exchange theory to argue that positive affect and satisfaction from LMX would spillover into the family domain and lead to reciprocation via voice behavior. Results in a sample of blue-collar manufacturing employees in China supported the mediating role of *work-to-family spillover* on the LMXto-voice relationship.

### Felt Obligations.

Vadera and colleagues (2013) reviewed the constructive deviance literature and posited that *felt obligations* should mediate the effects of LMX on constructive deviance (e.g., taking charge, voice, whistle-blowing, etc.). "The logic behind a felt obligation mechanism can be found in social exchange theory (Blau, 1964). This theory suggests that a reciprocal obligation is likely to develop between two (or more) parties through a series of mutual, although not necessarily simultaneous, exchanges. One party makes some form of contribution to the other party, and in doing so, develops an expectation of a return at a future time. The other party, having received something, (p. 165) develops a sense of obligation to reciprocate" (Vadera et al., 2013, p. 1252).

This summarizes key research on why LMX affects change-oriented extra-role behavior. Next, we discuss boundary conditions established in the literature that buffer or enhance the effects of LMX on change-oriented extra-role behavior.

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# Moderators of the LMX-to-Change-Oriented Extra-Role Behavior Relationship

### **Employee Characteristics.**

To our knowledge, only one study has considered employee or leader characteristics as moderators of the LMX-to-change-oriented extra-role behavior relationship. Van Dyne and colleagues (2008) demonstrated that the relationship between LMX and voice depended on *role perceptions*. Results across two international samples showed that viewing voice as in-role strengthened the relationship between LMX and voice.

### **Contextual Factors.**

In comparison to person- based moderators, there is more research on contextual influences that qualify the LMX-to- change-oriented extra-role behavior relationship. Bhal and Dadhich (2011) showed that the LMX-to-whistle-blowing relationship was strengthened when *moral intensity* was high, across three lab studies in India. Hsiung (2012) demonstrated second stage moderated mediation of the relationship between authentic leadership and voice via LMX. In a sample of real estate sales personnel, the link was enhanced by *procedural justice climate*. Finally, Vigoda-Gadot and Beeri (2012) showed that *perceptions of organizational politics* moderated the relationship between LMX and change-oriented citizenship. The relationship was stronger when perceptions of organizational politics were high and weaker when low.

Now that we have described the research on LMX as a predictor of discretionary behavior that aims to improve upon and change the status quo in ways that will benefit the organization, we shift our focus to the fourth type of performance predicted by LMX. This final behavior is adaptive performance.

# LMX and Adaptive Performance

### **Establishing the Relationship**

Adaptive performance includes a range of behaviors that represent actions that support or respond to changing contextual factors. Consistent with the conceptualization of adaptive performance advanced by Pulakos and colleagues (2000), we include both creative performance and expatriate performance as types of adaptive performance. This is because one aspect of adaptive performance requires "the individual to bring complex

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matters or situations to their desired end or develop creative solutions to novel, difficult problems" (p. 613) and because another aspect of adaptive performance "involves successfully integrating into a new culture or environment by fully understanding and willingly behaving in accordance with the accepted customs, values, rules, and structures operating within it" (p. 614). However, because Tierney (this volume) is dedicated to LMX and creativity, we only touch briefly on the literature covering the LMX-to-creative performance link.

Scott and Bruce (1994) first established the relationship between LMX and creativity, and a large number of studies have confirmed this finding (e.g., Basu & Green, 1997; Khazanchi & Masterson, 2011; Liao, Liu, & Loi, 2010; Olsson, Hemlin, & Pousette, 2012; Tierney et al., 1999; Van Dyne, Jehn, & Cummings, 2002; Yuan & Woodman, 2010). Kraimer and colleagues (2001) demonstrated a relationship between LMX and expatriate performance in a sample from three US-based Fortune 500 companies. Pattie and colleagues (2013) extended this work and showed that LMX mediated the effects of goal congruence on objective expatriate performance using survey and archival data from a large international consulting firm. Walumbwa and colleagues (2009) showed that LMX mediated the positive effect of interpersonal and informational justice on voluntary learning behaviors in a sample from a large automotive dealership in the southwestern United States. Finally, Paparoidamis and Guenzi (2009) demonstrated that LMX was positively associated with adaptive selling behaviors of field sales representatives in France.

Next, we provide more clarity as to why LMX affects adaptive performance by reviewing mediators that tie LMX to adaptive performance. We also discuss boundary conditions to the LMX-to-adaptive performance link.

### Mediators of the LMX-to-Adaptive Performance Relationship

Our review identified a variety of mediators that help explain the LMX-to-creative performance or innovative performance relationships. These include *support*, *resource supply* (Scott & Bruce, 1994), *self-efficacy* (Liao et al., 2010), *expected image gains*, *expected positive performance outcomes* (Yuan & Woodman, 2010), *information sharing* (p. 166) (Khazanchi & Masterson, 2011), *work engagement* (Agarwal, Datta, Blake-Beard, & Bhargava, 2012), *psychological empowerment*, and *felt obligations* (Pan, Sun, & Chow, 2012). We are not aware of other studies exploring mediators of adaptive behaviors.

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## Moderators of the LMX-to-Adaptive Performance Relationship

Very few studies have established moderators of the LMX-to-adaptive performance relationship—including studies of creative performance. One exception is Benson and Pattie's (2009) study of expatriate performance. Their results demonstrated that LMX *relationships with home* versus *host supervisors* had differential effects on expatriate outcomes. LMX with host country supervisors was more closely aligned with short-term outcomes and LMX with home country supervisors was more closely aligned with long-term outcomes in an international professional services firm. Moderators of the LMX-to-creative performance and innovative behavior relationships include *LMX differentiation* (Liao et al., 2010) and *organic vs. mechanistic work-unit structure* (Pan et al., 2012).

This summary of the linkage between LMX and positively intended adaptive behaviors that respond to changing contextual conditions concludes our review of the literature that examines LMX and four different performance outcomes. We next suggest directions for future research based on our review. Specifically, we focus on under-researched topics that have the potential to advance our understanding of LMX-to-performance relationships.

## Suggestion for Future Research"New Moderators of the LMX-to-Performance Link"

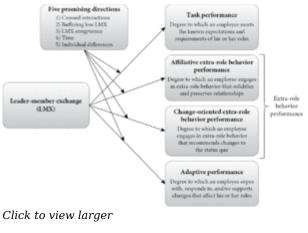
The above review of the literature highlights six key conclusions: (a) LMX is a strong predictor of different types of performance, (b) social exchange theory is the predominant conceptual framework used to explain the LMX-to-performance relationship across the four performance categories, (c) social exchange is also most frequently used to justify mediators that link LMX with performance across the four types of performance, (d) contextual moderators have received more research attention than employee or leader characteristics across the four outcomes, (e) research attention has slowly shifted to a broader range of performance outcomes (e.g., task performance, then affiliative extrarole behavior, then change-oriented extra-role behavior, and finally adaptive performance), and, finally, (f) the relationships between LMX and each of the four types of performance are overwhelmingly positive.

These six patterns identified in our review suggest new opportunities for research. Specifically, we recommend future research on under-researched aspects of LMX-toperformance relationships. For example, using a broader range of theoretical frameworks and going beyond social exchange, as illustrated by Walumbwa and colleagues (2011), is promising. Researchers can also contribute to the LMX domain by focusing on the less

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commonly researched domain of adaptive performance. This is especially critical given the importance of adaptability in the dynamic environments facing today's organizations (Ilgen & Pulakos, 1999; Pulakos et al., 2000). Researchers can also add to our understanding of LMX relationships by considering additional leader characteristics as moderators of the LMX-to-performance relationship (for an example, see Erdogan & Enders, 2007).



*Fig. 9.2* Future research directions for leadermember exchange-to-performance relationships. Going beyond these overall observations, we recommend five new approaches to thinking about moderators of the LMX-to-performance link (see Figure 9.2). The first is more nuanced consideration of crossed interactions because this would provide balance to the current emphasis on positive effects of LMX on performance. The second

is research on buffering factors that mitigate the detrimental effects of low LMX on performance because this would have important practical implications for managers. The third is research on performance consequences of congruence between supervisor and employee ratings of LMX because this has received almost no empirical attention. The fourth is consideration of the role of time in influencing the LMX-to-performance link, which is also under-studied. Finally, the fifth recommendation is for research that examines individual differences as moderators of the relationships between LMX and all four types of performance because high LMX should have differential performance implications depending on dispositional characteristics.

# Under What Conditions is LMX Negatively Related to Performance (Crossed Interactions)?

As documented by this review, LMX clearly has positive implications for performance. Researchers, however, should challenge the implicit assumption (p. 167) that LMX always positively predicts performance by theorizing and testing crossed interactions, which show both positive and negative relationships. As examples, we describe three studies that have demonstrated or suggested crossed interactions.

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Erdogan and Enders (2007) provide one of the few studies we located that showed a crossed interaction. Specifically, they demonstrated that supervisor's perceived organizational support moderated the relationship between LMX and performance, with both positive and negative effects in their illustration of the interaction. LMX had a positive relationship when supervisor's perceived organizational support was high and a negative relationship when perceived organizational support was low. Although they did not report simple slopes, their results indicate the value of considering social exchange of supervisors (e.g., supervisor perceived organizational support) and employees (e.g., employee LMX) as a basis for predicting other crossed interactions.

Sekiguchi and colleagues (2008) demonstrated a three-way interaction between LMX, job embeddedness, and organization-based self-esteem that has implications for research targeting crossed interactions. Specifically, this study demonstrated that organizationbased self-esteem moderated the LMX-to-performance relationship for employees high in embeddedness. LMX was negatively related to performance when organization-based self-esteem was high and positively related to performance when organization-based selfesteem was low. This suggests that high-quality supervisor-subordinate relationships may detract from performance of employees who are highly embedded in their jobs and are also high in organization-based self-esteem. Perhaps the combination of embeddedness and organization-based self-esteem functions as a substitute for leadership, making high LMX dysfunctional. Based on this finding, we recommend research on other situations (e.g., high performers with significant tenure in their roles) where other self-concept constructs (e.g., strong identity or high independent identity) could cause crossed interactions where LMX is both positively and negatively related to performance.

Sparrowe and colleagues (2006) demonstrated that LMX interacts with leader downward influence tactics. By repositioning the interaction, with LMX as the independent variable and downward influence tactics as the moderator, LMX would be positively related to performance when downward influence tactics are high and negatively related when downward influence tactics are low—for two of the three downward influence tactics—inspirational appeals and consultation. This suggests that LMX may have negative implications for performance when supervisors do not engage in downward influence tactics. Reworded, if leaders with high-quality (p. 168) supervisor-subordinate relationships fail to use inspirational appeals and consultation, performance of high LMX subordinates may suffer. Accordingly, we recommend future research on other management tactics and types of leadership that may detract from the performance of employees with high-quality relationships. For example, LMX may be negatively related to employee performance if leaders use a laissez-faire style of management, fail to set clear and challenging goals for subordinates, or if they allow personal liking to interfere with their managerial role and do not provide corrective performance feedback.

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## What Buffering Factors Mitigate the Negative Effects of Low LMX?

Although some research has identified buffering factors that mitigate the negative effects of low LMX, additional studies are needed because of the practical implications for managers. As our review of the literature has shown, high LMX is beneficial for performance. On the other hand, this also means that low LMX is detrimental to performance. Finding ways to avoid the negative implications of low LMX is critically important because it should facilitate more effective utilization of leader resources. It is not practical for leaders to develop high-quality LMX relationships with all employees, but they may be able to use other management techniques to buffer the role of low LMX, and some employees may be less influenced by low LMX.

Several studies, for example, demonstrate that employee factors can mitigate the detrimental effects of low LMX, and this research sheds light on promising topics for future research. For example, Van Dyne and colleagues (2008) demonstrated that viewing helping as in-role (as opposed to extra-role) buffered the negative effect of low quality LMX on affiliative extra-role behavior (helping). Bauer and colleagues (2006) demonstrated that high extraversion (as opposed to low extraversion) buffered the negative effect of low LMX on performance. Other types of employee characteristics have the potential to buffer the negative effects of low LMX on performance because research shows that agreeableness and conscientiousness interact with LMX to predict performance (Kamdar & Van Dyne, 2007). For example, by repositioning the interactions in the Kamdar and Van Dyne study, with LMX as the independent variable and personality (i.e., agreeableness and conscientiousness) as the moderator, personality (i.e., agreeableness) buffers the detrimental effects of low LMX on performance.

Leader characteristics are also promising as mitigators of the negative effects of low LMX. Chang and Johnson (2010) demonstrated that the negative effects of low LMX on performance and organizational citizenship behavior were weakened when supervisors had strong relational identities. Anand, Vidyarthi, Liden, and Rousseau (2010) showed that special deals between leaders and followers buffered the detrimental effects of low LMX. In other words, idiosyncratic deals (i-deals) can substitute for LMX.

Finally, Bolino and Turnley (2009) developed the theoretical argument that low LMX influences organizational outcomes based on relative deprivation of low LMX employees and proposed potential moderators (buffers and enhancers) of the indirect relationship. The moderators suggested are wanting LMX (e.g., supervisor power, relationship costs, and availability of LMX substitutes), entitlement for LMX (e.g., subordinate effort), other's LMX status (e.g., LMX proportion and friend's LMX), self-blame for LMX status

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(e.g., LMX influenced by impression management), feasibility of changes to LMX status (e.g., temporary LMX status and previous high-quality LMX), and ability to change LMX status (e.g., previous employee effort, LMX re-evaluation, and self-efficacy). In sum, the existing research on employee, supervisor, and situational factors that may buffer the negative effects of low LMX and substitute for high LMX is promising and suggests the value of future research on other substitutes. This could include role perceptions, personality, self-efficacy, self-concept, and social comparison processes.

# What Role Does LMX Congruence Play Relative to Performance Outcomes?

LMX is a unique leadership theory because it focuses on dyadic relationships rather than on leader traits and behaviors (Dulebohn et al., 2012). Nevertheless, LMX has traditionally been assessed from the leader's perspective *or* from the member's perspective even though meta-analytic evidence demonstrates that LMX agreement between leaders and subordinates is only moderate. For example, Gerstner and Day (1997) and Sin, Nahrgang, and Morgeson (2009) demonstrated a population estimate of the correlation (corrected for unreliability) of 0.37.

To date, few studies have considered the effects of LMX congruence on performance. Cogliser, Schriesheim, Scandura, and Gardner (2009), (p. 169) however, showed that balanced high LMX relationships predicted high performance, balanced low relationships predicted low performance, and incongruent relationships predicted intermediate levels of performance. However, this study artificially dichotomized the sample to test for agreement, and this approach has empirical limitations (see MacCallum, Zhang, Preacher, & Rucker, 2002). Markham, Yammarino, Murry, and Palanski (2010) also tested LMX congruence effects on performance but also dichotomized the sample.

Other theoretical perspectives may help to shed light on incongruence in LMX perceptions and performance. For example, self-verification theory (Swann, 1983) and cognitive dissonance theory (Festinger, 1957) emphasize the value of congruence for stability and predictability and position incongruence as a source of imbalance that leads to change. We recommend more nuanced theory building on the role of congruence between employee and manager perceptions of LMX and recommend future research on when and why congruence is meaningful to performance. We also recommend more robust analytical techniques such as polynomial regression and response surface methodology (Edwards, 2002) for analyzing the effects of congruence and incongruence.

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### What Role Does Time Play Relative to the LMX-to-Performance Link?

Time is another factor that is important to LMX and the LMX-to-performance relationship. As has been established in this review, LMX is positively related to performance, and longitudinal studies demonstrate that LMX predicts performance when measured at different times (e.g., Liden & Graen, 1980). Additionally, research has demonstrated that performance predicts LMX. For example, Liden, Wayne, and Stilwell (1993) demonstrated that performance predicted supervisor-rated LMX over time in a sample of new hires. Bauer and Green (1996) demonstrated that performance predicted LMX and change in LMX over time in a longitudinal study of graduates over the first 34 weeks in new jobs. Finally, Nahrgang, Morgeson, and Ilies (2009) demonstrated that employee extraversion and leader agreeableness influenced initial ratings of LMX, but performance influenced development of LMX over time using a longitudinal design and latent growth curve modeling.

Since LMX is an established predictor of performance, and performance is an established predictor of LMX, it seems reasonable to expect a reciprocal relationship between LMX and performance over time. Yet, to our knowledge no research has examined the reciprocal effects of LMX and performance over time. Furthermore, no empirical work has assessed when and why the reciprocal relationship tapers off or stabilizes. This is an important gap because theory on role taking, role making, and role routinization (e.g., Graen & Scandura, 1987) provides a theoretical framework to explore these relationships. In sum, we view longitudinal research on reciprocal relationships between LMX and performance over time and growth trajectory research as especially promising. Additionally, we recommend future research on potential boundary conditions that buffer or enhance these relationships over time.

# How Do Individual Differences Change the Effects of High LMX on Performance?

Although research shows that LMX is positively related to task performance, affiliative extra-role behavior, change-oriented extra role behavior, and adaptive performance, it is unlikely that LMX is associated with all types of performance at all times. Instead, individual differences most likely influence which types of performance will be more strongly related to LMX at any point in time. Future research could integrate trait activation theory (Tett & Burnett, 2003; Tett & Guterman, 2000) and resource allocation theory (Kanfer & Ackerman, 1989) to consider specific individual differences that enhance the relationship between LMX and different types of performance while simultaneously weakening the effects of LMX on other types of performance. For

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example, trait activation theory arguments suggest that the relationship between LMX and change-oriented extra-role behavior might be positive and especially strong for those high in proactive personality, but resource allocation theory arguments suggest that this may divert resources away from task performance or away from affiliative extra-role behavior. Consistent with this idea, LePine and Van Dyne (2001) demonstrated that the personality trait of agreeableness was positively related to affiliative behavior and negatively related to change-oriented behavior. Thus, it would be useful for future research to consider trade-offs between LMX and types of performance as a function of individual differences.

# Conclusion

The LMX-to-performance relationship is one of the most heavily researched in the LMX literature. As documented by this review, we know a substantial (p. 170) amount about leader-subordinate relations and their effects on performance based on the past 40 years of research. Researchers, however, have predominantly used social exchange theory frameworks and social exchange-based mediators, with an emphasis on contextual moderators and positive relationships across all four types of performance. Although this approach has allowed researchers to build consensus on many of these relationships, our review highlights promising future research opportunities. We hope our identification of under-researched topics triggers LMX research in new and novel directions and further deepens our understanding of the LMX-to-performance relationship.

# References

Agarwal, U. A., Datta, S., Blake-Beard, S., & Bhargava, S. (2012). Linking LMX, innovative work behaviour and turnover intentions the mediating role of work engagement. *Career Development International*, *17*, 208–230.

Aguinis, H., Pierce, C. A., Bosco, F. A., Dalton, D. R., & Dalton, C. M. (2011). Debunking myths and urban legends about meta-analysis. *Organizational Research Methods*, 14, 306–331.

Anand, S., Vidyarthi, P. R., Liden, R. C., & Rousseau, D. M. (2010). Good citizens in poorquality relationships: Idiosyncratic deals as a substitute for relationship quality. *Academy of Management Journal*, *53*, 970–988.

Anderson, S. E., & Williams, L. J. (1996). Interpersonal, job, and individual factors related to helping processes at work. *Journal of Applied Psychology*, *81*, 282–296.

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Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*, 191–215.

Basu, R., & Green, S. G. (1995). Subordinate performance, leader-subordinate compatibility, and exchange quality in leader-member dyads—a field-study. *Journal of Applied Social Psychology*, 25, 77–92.

Basu, R., & Green, S. G. (1997). Leader-member exchange and transformational leadership: An empirical examination of innovative behaviors in leader-member dyads. *Journal of Applied Social Psychology*, *27*, 477–499.

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.

Benson, G. S., & Pattie, M. (2009). The comparative roles of home and host supervisors in the expatriate experience. *Human Resource Management*, *48*, 49–68.

Bettencourt, L. A. (2004). Change-oriented organizational citizenship behaviors: The direct and moderating influence of goal orientation. *Journal of Retailing*, *80*, 165–180.

Bhal, K. T. (2006). LMX-citizenship behavior relationship: Justice as a mediator. *Leadership & Organization Development Journal*, *27*, 106–117.

Bhal, K. T., & Dadhich, A. (2011). Impact of ethical leadership and leader-member exchange on whistle blowing: The moderating impact of the moral intensity of the issue. *Journal of Business Ethics*, *103*, 485-496.

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

Bolino, M. C., & Turnley, W. H. (2009). Relative deprivation among employees in lowerquality leader-member exchange relationships. *The Leadership Quarterly*, *20*, 276–286.

Bommer, W. H., Johnson, J. L., Rich, G. A., Podsakoff, P. M., & Mackenzie, S. B. (1995). On the interchangeability of objective and subjective measures of employee performance —a metaanalysis. *Personnel Psychology*, *48*, 587-605.

Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt, W. C. Borman & Associates (Eds.), *Personnel selection in organizations* (pp. 71-98). San Francisco: Jossey-Bass.

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Botero, I. C., & Van Dyne, L. (2009). Employee voice behavior interactive effects of LMX and power distance in the united states and colombia. *Management Communication Quarterly*, 23, 84–104.

Brief, A. P., & Motowidlo, S. J. (1986). Pro-social organizational behaviors. *Academy of Management Review*, *11*, 710–725.

Burris, E. R., Detert, J. R., & Chiaburu, D. S. (2008). Quitting before leaving: The mediating effects of psychological attachment and detachment on voice. *Journal of Applied Psychology*, *93*, 912–922.

Campbell, J. P. (1990). Modelling the performance prediction problem in industrial and organizational psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (2nd ed., Vol. 1, pp. 678–732). Palo Alto, CA: Consulting Psychologist Press.

Campbell, J. P., McCloy, R. A., Oppler, S. H., & Sager, C. E. (1993). A theory of performance. In N. Schmitt, W. C. Borman & Associates (Eds.), *Personnel selection in organizations* (pp. 35–69). San Francisco: Jossey-Bass.

Chang, C. H., & Johnson, R. E. (2010). Not all leader-member exchanges are created equal: Importance of leader relational identity. *Leadership Quarterly*, *21*, 796–808.

Chen, G., Kirkman, B. L., Kanfer, R., Allen, D., & Rosen, B. (2007). A multilevel study of leadership, empowerment, and performance in teams. *Journal of Applied Psychology*, *92*, 331–346.

Chen, Z., Lam, W., & Zhong, J. A. (2007). Leader-member exchange and member performance: A new look at individual-level negative feedback-seeking behavior and team-level empowerment climate. *Journal of Applied Psychology*, *92*, 202–212.

Cogliser, C. C., Schriesheim, C. A., Scandura, T. A., & Gardner, W. L. (2009). Balance in leader and follower perceptions of leader-member exchange: Relationships with performance and work attitudes. *Leadership Quarterly*, *20*, 452–465.

Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management, 26*, 435–462.

Dansereau, F., Graen, G. B., & Haga, W. J. (1975). A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. *Organizational Behavior and Human Decision Processes*, *13*, 46–78.

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Deluga, R. J. (1998). Leader-member exchange quality and effectiveness ratings: The role of subordinate-supervisor conscientiousness similarity. *Group and Organization Management*, *23*, 189–216.

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.

Duarte, N. T., Goodson, J. R., & Klich, N. R. (1994). Effects of dyadic quality and duration on performance-appraisal. *Academy of Management Journal*, *37*, 499–521.

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.

Dunegan, K. J., Duchon, D., & Uhl-Bien, M. (1992). Examining the link between leadermember exchange and subordinate performance—the role of task analyzability and variety as moderators. *Journal of Management*, *18*, 59–76.

Edwards, J. R. (2002). Alternatives to difference scores: Polynomial regression analysis and response surface methodology. In F. Drasgow & N. W. Schmitt (Eds.), *Advances in measurement and data analysis* (pp. 350–400). San Francisco: Jossey-Bass.

Elicker, J. D., Levy, P. E., & Hall, R. J. (2006). The role of leader-member exchange in the performance appraisal process. *Journal of Management*, *32*, 531–551.

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.

Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.

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.

Graen, G. B., Novak, M. A., & Sommerkamp, P. (1982). The effects of leader—member exchange and job design on productivity and satisfaction: Testing a dual attachment model. *Organizational Behavior and Human Performance*, *30*, 109–131.

Graen, G. B., & Scandura, T. A. (1987). Toward a psychology of dyadic organizing. *Research in Organizational Behavior*, *9*, 175–208.

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Griffin, M. A., Neal, A., & Parker, S. K. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal*, *50*, 327–347.

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.

Howell, J. M., & Hall-Merenda, K. E. (1999). The ties that bind: The impact of leadermember exchange, transformational and transactional leadership, and distance on predicting follower performance. *Journal of Applied Psychology*, *84*, 680–694.

Hsiung, H. H. (2012). Authentic leadership and employee voice behavior: A multi-level psychological process. *Journal of Business Ethics*, *107*, 349–361.

Hui, C., Law, K. S., & Chen, Z. X. (1999). A structural equation model of the effects of negative affectivity, leader-member exchange, and perceived job mobility on in-role and extra-role performance: A chinese case. *Organizational Behavior and Human Decision Processes*, 77, 3–21.

Ilgen, D. R., & Pulakos, E. D. (1999). Employee performance in today's organizations. In D. R. Ilgen & E. D. Pulakos (Eds.), *The changing nature of performance: Implications for staffing, motivation, and development* (pp. 21–55). San Francisco: Jossey-Bass.

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.

Johnson, J. W. (2003). Toward a better understanding of the relationship between personality and individual job performance. In M. R. Barrick & A. M. Ryan (Eds.), *Personality and work* (pp. 83–120). San Francisco: Jossey-Bass.

Judge, T. A., & Ferris, G. R. (1993). Social-context of performance evaluation decisions. *Academy of Management Journal, 36*, 80–105.

Kacmar, K. M., Witt, L. A., Zivnuska, S., & Gully, S. M. (2003). The interactive effect of leader-member exchange and communication frequency on performance ratings. *Journal of Applied Psychology*, *88*, 764–772.

Page 27 of 33

PRINTED FROM OXFORD HANDBOOKS ONLINE (www.oxfordhandbooks.com). (c) Oxford University Press, 2015. All Rights Reserved. Under the terms of the licence agreement, an individual user may print out a PDF of a single chapter of a title in Oxford Handbooks Online for personal use (for details see Privacy Policy).

Kamdar, D., & Van Dyne, L. (2007). The joint effects of personality and workplace social exchange relationships in predicting task performance and citizenship performance. *Journal of Applied Psychology*, *92*, 1286–1298.

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

Karriker, J. H., & Williams, M. L. (2009). Organizational justice and organizational citizenship behavior: A mediated multifoci model. *Journal of Management*, *35*, 112–135.

Khazanchi, S., & Masterson, S. S. (2011). Who and what is fair matters: A multi-foci social exchange model of creativity. *Journal of Organizational Behavior, 32*, 86–106.

Kraimer, M. L., Wayne, S. J., & Jaworski, R. A. (2001). Sources of support and expatriate performance: The mediating role of expatriate adjustment. *Personnel Psychology*, *54*, 71–99.

Kulkarni, S., & Ramamoorthy, N. (2011). Leader-member exchange, subordinate stewardship, and hierarchical governance. *International Journal of Human Resource Management*, *22*, 2770–2793.

LePine, J. A., & Van Dyne, L. (2001). Voice and cooperative behavior as contrasting forms of contextual performance: Evidence of differential relationships with big five personality characteristics and cognitive ability. *Journal of Applied Psychology*, *86*, 326–336.

Li, N., Liang, J., & Crant, J. M. (2010). The role of proactive personality in job satisfaction and organizational citizenship behavior: A relational perspective. *Journal of Applied Psychology*, *95*, 395–404.

Liao, H., Liu, D., & Loi, R. (2010). Looking at both sides of the social exchange coin: A social cognitive perspective on the joint effects of relationship quality and differentiation on creativity. *Academy of Management Journal*, *53*, 1090–1109.

Liden, R. C., & Graen, G. B. (1980). Generalizability of the vertical dyad linkage model of leadership. *Academy of Management Journal*, *23*, 451–465.

Liden, R. C., Sparrowe, R. T., & Wayne, S. J. (1997). Leader-member exchange theory: The past and potential for the future. In G. R. Ferris (Ed.), *Research in personnel and human resources management* (pp. 47–119). Oxford, England: Elsevier Science.

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.

Page 28 of 33

PRINTED FROM OXFORD HANDBOOKS ONLINE (www.oxfordhandbooks.com). (c) Oxford University Press, 2015. All Rights Reserved. Under the terms of the licence agreement, an individual user may print out a PDF of a single chapter of a title in Oxford Handbooks Online for personal use (for details see Privacy Policy).

Liu, J., Kwan, H. K., & Mao, Y. (2012). Mentorship quality and proteges work-to-family positive spillover, career satisfaction and voice behavior in china. *International Journal of Human Resource Management*, 23, 4110–4128.

MacCallum, R. C., Zhang, S. B., Preacher, K. J., & Rucker, D. D. (2002). On the practice of dichotomization of quantitative variables. *Psychological Methods*, *7*, 19–40.

Markham, S. E., Yammarino, F. J., Murry, W. D., & Palanski, M. E. (2010). Leadermember exchange, shared values, and performance: Agreement and levels of analysis do matter. *The Leadership Quarterly*, *21*, 469-480.

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.

Miceli, M. P., & Near, J. P. (1984). The relationships among beliefs, organizational position, and whistle-blowing status—a discriminant-analysis. *Academy of Management Journal*, *27*, 687–705.

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.

Olsson, L., Hemlin, S., & Pousette, A. (2012). A multi-level analysis of leader-member exchange and creative performance in research groups. *Leadership Quarterly, 23,* 604–619.

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

Pan, W., Sun, L. Y., & Chow, I. H. S. (2012). Leader-member exchange and employee creativity: Test of a multilevel moderated mediation model. *Human performance*, *25*, 432-451.

Paparoidamis, N. G., & Guenzi, P. (2009). An empirical investigation into the impact of relationship selling and LMX on salespeople's behaviours and sales effectiveness. *European Journal of Marketing*, 43, 1053–1075.

Pattie, M. W., Benson, G., Casper, W., & McMahan, G. C. (2013). Goal congruence: Fitting international assignment into employee careers. *International Journal of Human Resource Management*, 24, 2554–2570.

Page 29 of 33

PRINTED FROM OXFORD HANDBOOKS ONLINE (www.oxfordhandbooks.com). (c) Oxford University Press, 2015. All Rights Reserved. Under the terms of the licence agreement, an individual user may print out a PDF of a single chapter of a title in Oxford Handbooks Online for personal use (for details see Privacy Policy).

Pearson, A. W., & Marler, L. E. (2010). A leadership perspective of reciprocal stewardship in family firms. *Entrepreneurship Theory and Practice*, *34*, 1117–1124.

Pulakos, E. D., Arad, S., Donovan, M. A., & Plamondon, K. E. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology*, *85*, 612–624.

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.

Rotundo, M., & Sackett, P. R. (2002). The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: A policy-capturing approach. *Journal of Applied Psychology*, *87*, 66–80.

Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior—a path model of individual innovation in the workplace. *Academy of Management Journal*, *37*, 580–607.

Sekiguchi, T., Burton, J. P., & Sablynski, C. J. (2008). The role of job embeddedness on employee performance: The interactive effects with leader-member exchange and organization-based self-esteem. *Personnel Psychology*, *61*, 761–792.

Settoon, R. P., Bennett, N., & Liden, R. C. (1996). Social exchange in organizations: Perceived organizational support, leader-member exchange, and employee reciprocity. *Journal of Applied Psychology*, *81*, 219–227.

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.

Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior—its nature and antecedents. *Journal of Applied Psychology*, *68*, 653–663.

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

Sun, L. Y., Chow, I. H. S., Chiu, R. K., & Pan, W. (2013). Outcome favorability in the link between leader-member exchange and organizational citizenship behavior: Procedural fairness climate matters. *Leadership Quarterly*, *24*, 215–226.

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Swann, W. B. (1983). Self-verification: Bringing social reality into harmony with the self. In J. Suls & A. G. Greenwald (Eds.), *Psychological perspectives on the self* (Vol. 2, pp. 33– 66). Hillsdale, NJ: Erlbaum.

Takeuchi, R., Yun, S., & Wong, K. F. E. (2011). Social influence of a coworker: A test of the effect of employee and coworker exchange ideologies on employees' exchange qualities. *Organizational Behavior and Human Decision Processes*, *115*, 226–237.

Tepper, B. J., Uhl-Bien, M., Kohut, G. F., Rogelberg, S. G., Lockhart, D. E., & Ensley, M. D. (2006). Subordinates' resistance and managers' evaluations of subordinates' performance. *Journal of Management*, *32*, 185–209.

Tett, R. P., & Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology*, *88*, 500–517.

Tett, R. P., & Guterman, H. A. (2000). Situation trait relevance, trait expression, and cross-situational consistency: Testing a principle of trait activation. *Journal of Research in Personality*, *34*, 397–423.

Tierney, P., Bauer, T. N., & Potter, R. E. (2002). Extra-role behavior among mexican employees: The impact of LMX, group acceptance, and job attitudes. *International Journal of Selection and Assessment*, *10*, 292–303.

Tierney, P., Farmer, S. M., & Graen, G. B. (1999). An examination of leadership and employee creativity: The relevance of traits and relationships. *Personnel Psychology*, *52*, 591–620.

Vadera, A. K., Pratt, M. G., & Mishra, P. (2013). Constructive deviance in organizations: Integrating and moving forward. *Journal of Management*, *39*, 1221–1276.

Van Dyne, L., Cummings, L. L., & McLean Parks, J. (1995). Extra-role behaviors: In pursuit of construct and definitional clarity (a bridge over muddied waters). *Research in organizational behavior*, *17*, 215–285.

Van Dyne, L., Jehn, K. A., & Cummings, A. (2002). Differential effects of strain on two forms of work performance: Individual employee sales and creativity. *Journal of Organizational Behavior*, *23*, 57–74.

Van Dyne, L., Kamdar, D., & Joireman, J. (2008). In-role perceptions buffer the negative impact of low LMX on helping and enhance the positive impact of high LMX on voice. *Journal of Applied Psychology*, *93*, 1195–1207.

Page 31 of 33

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

Vecchio, R. P., & Gobdel, B. C. (1984). The vertical dyad linkage model of leadership: Problems and prospects. *Organizational Behavior and Human Performance*, *34*, 5–20.

Vigoda-Gadot, E., & Beeri, I. (2012). Change-oriented organizational citizenship behavior in public administration: The power of leadership and the cost of organizational politics. *Journal of Public Administration Research and Theory*, *22*, 573–596.

Walumbwa, F. O., Cropanzano, R., & Goldman, B. M. (2011). How leader-member exchange influences effective work behaviors: Social exchange and internal-external efficacy perspectives. *Personnel Psychology*, *64*, 739–770.

Walumbwa, F. O., Cropanzano, R., & Hartnell, C. A. (2009). Organizational justice, voluntary learning behavior, and job performance: A test of the mediating effects of identification and leader-member exchange. *Journal of Organizational Behavior, 30*, 1103–1126.

Wang, H., Law, K. S., Hackett, R. D., Wang, D. X., & 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.

Wat, D., & Shaffer, M. A. (2005). Equity and relationship quality influences on organizational citizenship behaviors—the mediating role of trust in the supervisor and empowerment. *Personnel Review*, *34*, 406–422.

Wayne, S. J., & Green, S. A. (1993). The effects of leader-member exchange on employee citizenship and impression management behavior. *Human Relations*, *46*, 1431–1440.

Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40, 82–111.

Xu, E., Huang, X., Lam, C. K., & Miao, Q. (2012). Abusive supervision and work behaviors: The mediating role of LMX. *Journal of Organizational Behavior, 33*, 531–543.

Yuan, F. R., & Woodman, R. W. (2010). Innovative behavior in the workplace: The role of performance and image outcome expectations. *Academy of Management Journal*, *53*, 323–342.

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Zhang, Z., Wang, M., & Shi, J. Q. (2012). Leader-follower congruence in proactive personality and work outcomes: The mediating role of leader-member exchange. *Academy of Management Journal*, *55*, 111–130.

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