LMX Differentiation: A Multilevel Review and Examination of its Antecedents and Outcomes

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Abstract
We examine antecedents and outcomes of leader–member exchange (LMX) differentiation, or the variability in LMX patterns within work groups. Individual-level characteristics and behaviors of leaders and followers, group context, and organizational context variables are presented as antecedents. We review and offer theoretical extensions to research examining the outcomes of LMX differentiation at the individual, group, and organizational levels. Our aim is to contribute to a meso-model of leadership and stimulate research that attends to the core element of the LMX model—LMX differentiation.

Keywords
Leadership, Leader–member exchange, Leader–member exchange differentiation, Multilevel, Meso-modeling

Meso-models of organizational behavior acknowledge the interdependence of activity across levels in organizations (House, Rousseau, & Thomas-Hunt, 1995), and effective leadership has been advanced as a central mechanism by which this activity may be coordinated in order to achieve organizational goals (Barnard, 1938). Leader–member exchange theory (LMX: Graen & Uhl-Bien, 1995; Liden, Sparrowe, & Wayne, 1997) has emerged as a prominent framework for understanding how leaders, by virtue of their “linking-pin” positions, might achieve such coordination (Graen, Cashman, Ginsburgh, & Schiemann, 1977). In this article, we examine the LMX model from a multilevel perspective in order to contribute to the discussion of leadership as a process that emerges and operates within the larger context in which it is embedded (Hunt, 1991; Osborn, Hunt, & Jauch, 2002).

The main premise of leader–member exchange (LMX) theory is that leaders develop differential relationships among the subordinates who report directly to them in their work groups—a practice referred to as LMX differentiation (Liden, Erdogan, Wayne, & Sparrowe, 2006). With some subordinates, leaders form low quality exchange relationships in which interpersonal interaction is largely restricted to fulfilling contractual obligations (Liden & Graen, 1980). With other subordinates, leaders form high
In these exchanges, leaders may offer mentoring (Scandura & Schriesheim, 1994), sponsorship of subordinates in social networks (Sparrowe & Liden, 2005), and empowerment (Chen, Kirkman, Kanfer, Allen, & Rosen, 2007; Liden, Wayne, & Sparrowe, 2000) in exchange for higher levels of subordinate organizational citizenship behaviors (OCB; Settoon, Bennett, & Liden, 1996) and task performance (Wayne, Shore, & Liden, 1997).

Most of the empirical research that has been undertaken to test and develop LMX theory has been single-level in nature, examining the relationship between individual-level perceptions of LMX quality and individual-level outcomes (Schriesheim, Castro, Zhou, & Yammarino, 2001). This individual-level focus is both surprising and troubling, given that the LMX model was originally advanced to account for how leaders' differential treatment of multiple subordinates in a work group influences activity within the group (Dansereau, Graen, & Haga, 1975). Recently, there has been a growing interest among researchers to address this limitation. This research has examined differentiation in LMX processes at the group (e.g., Boies & Howell, 2006; Henderson, Wayne, Shore, Bommer, & Tetrick, 2008; Liden et al., 2006, Schyns, 2006) and the individual–within-group (e.g., Henderson et al., 2008; Schriesheim, Castro, & Yammarino, 2000; Schriesheim, Neider, & Scandura, 1998) levels.

In this article, we provide a multilevel review and extension of research that has specifically examined LMX differentiation in order to motivate future research in this area. It is our aim to contribute to a discussion of leadership as a process that occurs within a larger social context that both shapes and is influenced by activity therein (Hunt, 1991; Osborn et al., 2002). In doing so, we contribute specifically to the LMX literature in two ways. First, we draw upon the meso-approach (House et al., 1995) to propose individual, work group, and organizational-level antecedents of LMX differentiation. Second, we offer propositions regarding the outcomes of LMX differentiation at these levels (individual, work group, and organization). Fig. 1 outlines the relationships and identifies the linkages across theoretical levels that
we examine in this article. Table 1 provides our specific propositions regarding moderation and mediation.

1. Multilevel terminology

A number of researchers have stressed that when developing and testing theoretical models, it necessary to clearly articulate the level(s) at which a construct operates, is measured, and is empirically examined (House et al., 1995; Klein, Dansereau, & Hall, 1994; Kozlowski & Klein, 2000; Rousseau, 1985; Yammarino, Dionne, Chun, & Dansereau, 2005). To do so, researchers must adopt appropriate terminology for describing multilevel processes. In this paper, we distinguish among the terms hierarchical level, level of theory, and level of analysis. We use the term hierarchical level to describe the level (such as executive, middle-management, or front-line) within an organization's formal hierarchy at which a construct is theorized or examined. We use the term level of theory to refer more generally to the “target (e.g., individual, group, organization)” at which a construct is placed in a theoretical model (Klein et al., 1994, p. 198). Finally, we use the term level of analysis to describe “the treatment of the data during statistical procedures” (Klein et al., 1994, p. 198).

2. LMX differentiation defined

Vertical dyad theory, which later evolved into LMX theory, was originally conceived as an alternative to the average leadership style approach, which operationalized leadership style as the average of subordinate perceptions of leaders' behaviors. Graen, Dansereau, & Minami (1972) argued that there is fault with the assumption that differences between each subordinate's perceptions of the leader's behaviors should be treated as measurement error. Instead, they contended that these differences between each subordinate's perceptions of the leader reflect valid differences in leader–member relationship quality.

Thus, we define LMX differentiation as a process by which a leader, through engaging in differing types of exchange patterns with subordinates, forms different quality exchange relationships (ranging from low to high) with them. As such, LMX differentiation refers to a set and outcome of dynamic and interactive exchanges that occur between leaders and members, the nature of which (transactional versus social exchange) may differ across dyads within a work group. In this article, we conceptualize a work group as a leader and those subordinates who formally report to him or her.

Because the LMX model focuses on differentiated exchanges and relationships in work groups, it seems apparent that the theory, itself, is multilevel in nature. For example, unless a work group is composed of a leader and a sole subordinate, LMX differentiation creates a group-level context in which there is within-group variability in the nature and quality of leader–subordinate relationships (Liden et al., 2006). This context shapes the experiences and cognitions of the leader and group members, as they evaluate the dynamics and outcomes of their own dyadic relations in comparison to those of other leader–subordinate dyads in the group (Henderson et al., 2008; Schriesheim et al., 2001). Furthermore, LMX theory does not negate the potential for a leader to treat subordinates differently in some aspects but similarly along others (Cogliser & Schriesheim, 2000).

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1 Including all of the mediators/moderators discussed in this article would add potentially confusing complexity to Fig. 1. Therefore, mediation and moderation propositions are summarized in Table 1.
Although some researchers have claimed that the LMX model is best viewed as a dyadic-level phenomenon (Graen & Uhl-Bien, 1995; Schriesheim et al., 2001), others have acknowledged the multilevel nature of the LMX model (Cogliser & Schriesheim, 2000; Erdogan & Liden, 2002; Henderson et al., 2008). Multilevel theory allows for a general construct, such as LMX, to be described with nuanced meaning and implications at different theoretical levels (House et al., 1995; Klein et al., 1994). For example, Henderson et al. (2008) suggested and found empirical support indicating that LMX processes may simultaneously operate at the: 1) individual-level resulting from social exchange motives tied to individual-level perceptions of LMX quality; 2) individual-within-group level resulting from comparison processes among group members as to the nature and quality of their LMX relationships; and 3) at the group-level as the LMX differentiation within a group may influence the salience of individual–within-group comparison processes on subordinate outcomes.

In Table 2, we provide a summary of how LMX research might be focused at differing theoretical levels in order to account for the multilevel nature of the differentiation process, as it occurs within a broader organizational context. In our review, we explore extant research that has examined LMX quality from the individual–within-group, dyad–within-group, and group-levels. We are unaware of any empirical research that has examined LMX processes at the group-within-organization level, but offer this approach in Table 2 as a potential avenue for exploring LMX relationships within a broader organizational context.

3. Antecedents of LMX differentiation

To date, very little empirical attention has been devoted to the antecedents of LMX differentiation. Our purpose in this section is to stimulate such research. Specifically, we offer propositions regarding antecedents (at the individual, work group, and organizational levels of theory) of LMX differentiation.

3.1. Individual level (leader characteristics)

Although presented in the literature as being self-contained and mutually exclusive, different leadership approaches may complement one another in helping to explain the processes through which differential relationships between leaders and followers develop within work groups. For example, both transformational leadership and servant leadership appear to overlap with the LMX model. Both of these approaches have been advanced to account for leadership practices that aim to help all followers reach their full potential.

Transformational leaders have been depicted as being capable of motivating followers through individualized consideration of their needs combined with a well-articulated communication of a vision or set of goals (Bass & Riggio, 2006). Transformational leaders seek to align followers in the pursuit of a shared vision through the provision of individualized support and encouragement (Bass, 1985; Yukl, 2006). Indeed, it has been found that transformational leadership is positively related to LMX quality, indicating that highly transformational leaders may form more high LMX relationships within their work groups than is true of less transformational leaders (Wang, Law, Hackett, Wang, & Chen, 2005). By
Table 1
Summary of propositions pertaining to moderation and mediation.

<table>
<thead>
<tr>
<th>Proposition</th>
<th>Moderating/mediating variables</th>
<th>Relationship defined</th>
</tr>
</thead>
<tbody>
<tr>
<td>3b.</td>
<td>Transformational and servant leadership</td>
<td>Group size and LMX differentiation are positively related when leaders are low in transformational or servant leadership; there is no relationship between LMX differentiation and group size when leaders are high in transformational or servant leadership.</td>
</tr>
<tr>
<td>5.</td>
<td>Task interdependence</td>
<td>At low levels of task interdependence, the relationship between team-oriented group culture and LMX differentiation is negative; at high levels of task interdependence, this relationship is positive.</td>
</tr>
<tr>
<td>6b.</td>
<td>Organizational-level culture</td>
<td>As work group-organization interdependence increases, the relationship between organizational-level cultural prescriptions and work group-level culture is more strongly positive.</td>
</tr>
<tr>
<td>6c.</td>
<td>Contingent workers’ desire for full-time employment</td>
<td>Work group-level culture mediates the relationship between organizational-level cultural prescriptions and LMX differentiation.</td>
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<tr>
<td>8c.</td>
<td>Norms prescribing respect for people at the work group</td>
<td>The employment of a mix of internalized and contingent workers in work groups is positively related to LMX differentiation when contingent workers do not desire full-time employment; there is no relationship between the employment of a mix of internalized and contingent workers and LMX differentiation when contingent workers do desire full-time employment.</td>
</tr>
<tr>
<td>8d.</td>
<td>Individual–within-group LMX</td>
<td>The employment of a mix of internalized and contingent workers in work groups is less strongly positively related to LMX differentiation when there is a greater emphasis on the cultural dimension of respect for people at the group-level.</td>
</tr>
<tr>
<td>10a.</td>
<td>Subordinates’ evaluations of leader bias, benevolence/self-interest, and their relative standing in their groups</td>
<td>Individual–within-group LMX quality is more strongly related to subordinate-level outcomes as group-level LMX differentiation increases.</td>
</tr>
<tr>
<td>10b.</td>
<td>Perceptions of leader non-bias, benevolence, and high group standing</td>
<td>Subordinates’ evaluations of leader bias, benevolence/self-interest, and their relative standing in their groups mediate between individual–within-group comparisons of LMX processes and subordinates’ evaluations of the procedural justice associated with the LMX relationship.</td>
</tr>
<tr>
<td>P10b.</td>
<td>Subordinates’ perceptions of the congruence of leaders’ behaviors with group-level culture</td>
<td>When subordinates perceive that leaders’ differential behaviors are congruent with prevailing group culture, there is a stronger, positive relationship between subordinates’ assessments, derived via within-group comparisons, that they are better off than fellow members (from both a resource and overall LMX quality standpoint) and perceptions of leader non-bias, benevolence, and high group standing.</td>
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Table 1 (continued)

<table>
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<tr>
<th>Proposition</th>
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</thead>
<tbody>
<tr>
<td>P10c.</td>
<td>Subordinates' perceptions of the congruence of leaders' behaviors with group-level culture</td>
<td>As task interdependence increases in a work group, subordinates' perceptions of the congruence of leaders' differential behaviors with group-level cultural prescriptions more strongly shapes the positive relationship between subordinates' assessments that they are better off than fellow members and perceptions of leader non-bias, benevolence, and high group standing.</td>
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<tr>
<td></td>
<td>Task interdependence in a work group</td>
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<td></td>
<td>Subordinates' assessments, derived via within-group comparisons, that they are better off than fellow members</td>
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<td>Perceptions of leader non-bias, benevolence, and high group standing</td>
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<tr>
<td>P11.</td>
<td>Group-level LMX differentiation</td>
<td>When subordinates' fairness perceptions of LMX differentiation are lower, there is a stronger, positive relationship between group-level LMX differentiation and the preference of group members to interact and develop stronger interpersonal relationships with members of similar LMX quality.</td>
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<td></td>
<td>Subordinates' fairness perceptions</td>
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<td></td>
<td>Preference of group members to interact and develop stronger interpersonal relationships with members of similar LMX quality</td>
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<td>P12.</td>
<td>Leaders' LMX with superiors</td>
<td>When leaders' LMX quality with superiors is high, LMX differentiation is more strongly and positively related to group performance in task interdependent groups.</td>
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<td>Group-level LMX differentiation</td>
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<td></td>
<td>Group performance in task interdependent groups</td>
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<td>P14a.</td>
<td>Top managers' fairness perceptions regarding LMX differentiation in the top management team</td>
<td>As top managers' fairness perceptions increase, the relationship between LMX quality and top managers' commitment to achieving organizational performance goals is more strongly positive.</td>
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<tr>
<td></td>
<td>Top managers' LMX</td>
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<td>Top managers' commitment to achieving organizational performance goals</td>
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definition, if transformational leaders form more high LMX relationships in work groups, median\(^2\) LMX quality is higher and there is less differentiation in overall relationship quality. Servant leaders, similar to transformational leaders, are concerned with the motivation of all group members. These leaders, who are referred to as servants because they put the needs of followers above their own needs, attempt to identify the potential in all subordinates through a process of listening, empathy, and compassion (Graham, 1991; Greenleaf, 1977). After determining the specific needs of each follower, servant leaders attempt to provide the necessary level of empowerment, mentoring, and emotional support in order to fully develop each follower. The theory suggests that when followers are the recipients of servant leadership behaviors they reciprocate for the support received by engaging in behaviors that benefit their leaders and fellow members, such as citizenship behaviors (Ehrhart, 2004). Because servant leadership behaviors focus on engaging all subordinates through practices that surpass tit-for-tat

\(^2\) We use the median, rather than mean, to depict the central tendency among LMX relationships within work groups for two reasons. First, deriving a measure of central tendency implies aggregation, in this case, aggregating the LMX quality of all leader-member relationships within work groups. Because LMX theory is based on the premise that relationship quality tends to vary considerably across leader-member relationships, within-group agreement is not expected. In such cases, the mean or average is not an appropriate measure of aggregation (Bliese, 2000). The median serves better for aggregation in such circumstances (Liden et al., 2006). Second, at a conceptual level the median best represents the “middle” relationship within a work group. For example, in a work group containing two LMX relationships with the highest possible scores, such as all 7 s on a 7-point scale, and all other relationships being of low quality, a mean of 4.25 would deceptively suggest that LMX quality tends to be moderate, when in fact most members of the work group have low quality LMX relationships.
transactional exchanges, they are may be more likely to develop high LMX relationships in their work groups (Liden, Wayne, Zhao, & Henderson, 2008).

**P1a.** The more leaders exhibit transformational or servant leadership behaviors, the less LMX differentiation that occurs within the work group.

**P1b.** The more leaders exhibit transformational or servant leadership behaviors, the higher the median LMX quality within the work group.

Although leaders may meaningfully differentiate among followers with respect to intangibles such as emotional support, task guidance, and career mentoring, tangible resources are also critical to the development and maintenance of leader–member relationships. Leaders may obtain resources in a number of ways. First, resources may be secured from the leader's immediate superior. Indeed, it has been empirically demonstrated that followers engaged in high LMX relationships, relative to their low LMX counterparts, perceive greater support from the organization and identify more with the organization when their leaders enjoy high LMX relationships with their immediate superiors (Tangirala, Green, & Ramanujam, 2007). These results suggest that the amount of resources available to leaders influences the degree to which high LMX relationships benefit followers (Graen et al., 1977). In addition to resources flowing from the leader's superior, followers also may benefit when their immediate leaders are central in advice networks in the organization. Leaders who are viewed as key players in the organization garner more information and resources from multiple contacts, therein (Sparrowe & Liden, 2005).

We contend that the amount of information and resources available to leaders from relationships with their superiors and social network contacts influences LMX differentiation and median LMX quality in work groups. When leaders are resource poor, they are not able to form multiple high LMX relationships, which would result in low median LMX quality and low differentiation in their work groups. Regardless of their desires, leaders with few resources simply would not be able to offer to followers what is required for the development of high LMX relationships. Conversely, leaders who have

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3 Space considerations preclude a thorough discussion of similar patterns that may exist for related forms of leadership, such as authentic (Avolio & Gardner, 2005; Gardner, Avolio, Luthans, May, & Walumbwa, 2005) and spiritual (Fry, 2003), but in sum, we expect that the more authentic or spiritual a leader, the less LMX differentiation and higher the median LMX quality within the group.
plentiful access to resources have the luxury of being able to support multiple high LMX relationships. In such situations, we expect that median LMX quality is higher than it is for leaders who are relatively deficient in resources. However, differentiation may vary considerably across resource rich leaders. Whereas some endowed leaders may desire to share the wealth with all subordinates, LMX research (e.g., Liden & Graen, 1980) indicates that the vast majority of leaders form LMX relationships with followers that differ considerably in quality.

P2. Leaders' access to resources is positively related both to median LMX quality and LMX differentiation. Specifically, the more resources available to leaders, the higher the median LMX quality and the greater the LMX differentiation.

3.2. Group level

3.2.1. Group size and composition

Forming high quality LMX relationships requires time (Dansereau et al., 1975), effort (Maslyn & Uhl-Bien, 2001), and resources (Liden, Sparrowe et al., 1997). As group size increases, it becomes increasingly likely that group members are more diverse in terms of knowledge, skills, abilities, demographic characteristics, values, and similarity to the leader. As these differences build, it may become difficult for a leader to expend the time and effort necessary to meet the unique needs and desires of all group members. Similarity-attraction processes (Byrne, 1971) may become particularly salient in such circumstances, motivating the leader to expend his or her time or effort in building social exchanges with those subordinates who are perceived as more similar to him or her. In fact, Liden, Wayne, & Stilwell (1993) discovered that subordinate job performance, although significant, tended to have relatively less influence on LMX development than interpersonal factors such as liking and perceived similarity. And even when leaders are willing to devote the required time to build social exchanges with all subordinates, in large groups they may lack the resources required to reciprocate in multiple social exchange relationships.

P3a. Group size is positively related to the LMX differentiation, such that the larger the group, the greater the LMX differentiation.

Although we contend that there is a positive relationship between-group size and LMX differentiation, this effect may be more likely for leaders who exhibit low levels of transformational or servant leadership behaviors. Followers respond to transformational and servant leadership styles by identifying more with the group and the leader (Bass, 1985; Greenleaf, 1977; Yukl, 2006). Tyler & Blader (2000), in describing their group engagement model, contend that followers may form strong identification with the group for reasons that are not exchange-based. As a result, leaders' relationships with followers are not derived exclusively from the exchange of resources (Sparrowe, Soetjipto, & Kraimer, 2006). Furthermore, servant leadership focuses on building the leadership potential in followers (Greenleaf, 1977; Liden et al., 2008). As this leadership potential grows, subordinates may take on informal leadership roles in their groups, helping to meet the needs and desires of fellow group members that the formal leader is unable to satisfy. For these reasons, we anticipate that servant and transformational leaders are able to overcome limitations in time and resources and build high quality relationships with subordinates, even in larger groups.

P3b. The relationship between work group size and LMX differentiation is moderated by transformational and servant leadership, such that group size and LMX differentiation are positively
related when leaders are low in transformational or servant leadership, whereas there is no relationship between-group size and LMX differentiation for leaders who are high in transformational or servant leadership.

3.2.2. Group-level culture

Over time, partly influenced by the organizational culture in which groups are embedded, a set of cultural norms and values evolve within work groups. Variability across groups in these norms and values may occur both between and within organizations (e.g., Safford, 1988) and arises as group members adopt a culture that is suited to prospering within their environments. A strong group culture implies agreement in members' mental schemas regarding how work and relationships are to be managed in the group (Hofstede, 1980). Group demographic composition, size, collective sense making, the cohesiveness of the group, and leadership practices may influence this level of agreement (Ford & Seers, 2006; House et al., 1995; Rentsch & Klimoski, 2001).

At the organizational level, a number of cultural dimensions have been identified, including innovation, stability, respect for people, outcome orientation, attention to detail, team orientation, and aggressiveness (O’Reilly, Chatman, & Caldwell, 1991). Of these dimensions, Erdogan, Liden, & Kraimer (2006) identified respect for people, aggressiveness, and team orientation as being most directly salient to leader–member relationships. We contend that these dimensions of culture, originally theorized to operate at an organizational level, may also be meaningfully adapted to describe group-level norms and values. For example, in groups that stress norms regarding respect for people, human dignity, recognition for accomplishments, concern for individual needs, and empathy may be valued among members. Leaders may strive to build high quality relationships with all or most members in these groups. They may also exhibit individualized attention, such that exchange patterns across leader–member dyads are differentiated as to the resources that serve as the currencies of these exchanges. In groups that place less emphasis on respect for people, leaders may discriminate among subordinates, building high quality relationships with only those subordinates who are perceived as offering the most benefit to the leader. Additionally, they may devote little time to meeting the unique needs and desires of their subordinates by offering differing resources as currencies of exchange across leader–member dyads.

P4a. The more a work group's culture is characterized by a respect for people, the less the LMX differentiation.

In groups that are characterized by an aggressive culture, members are competitive, approach their interactions with others in a self-interested way, and are inclined to behave with little concern for the social implications of their actions (O'Reilly et al., 1991). Leaders in such cultures may come to use and manipulate subordinates as needed in order to reach personal goals. Also, by offering extra-contractual resources and exchanges only to a select group of subordinates, they may attempt to further the competitive environment of the group as a means of inciting motivation.

P4b. The more a work group's culture is characterized by aggressiveness, the greater the LMX differentiation.

Finally, groups emphasizing collectivism and a team orientation pay special attention to promoting collaboration (O’Reilly et al., 1991). In order to achieve collaboration, team spirit and cohesiveness are stressed, which translate into norms that reinforce the formation of harmonious relationships between-group members and the leader (Erdogan et al., 2006). One of the drivers of the development of
harmonious relationships in team-oriented cultures is the prioritization of behaviors that benefit the team over those that reflect self-interest. In essence, a collectivistic perspective is valued in team-oriented cultures. Collectivists tend to identify strongly to with their groups and engage in behaviors that are partial to what benefits the group rather than what might be best for ones self. Given the focus on the team and the corresponding focus on developing harmonious relationships, it follows that team orientation and LMX differentiation are negatively related.

**P4c.** The more a work group's culture is characterized by collectivism and a team orientation, the less the LMX differentiation.

### 3.2.3. Task interdependence

Task interdependence has been identified as a particularly salient contextual variable with respect to group process and outcomes (Goodman, Ravlin, & Schminke, 1987; Liden, Wayne, & Bradway, 1997) and may occur within or between groups. Within-group task interdependence refers to the extent that the nature of group tasks requires interaction between-group members (Pearce & Gregersen, 1991). Low within-group task interdependence describes groups in which each member works independently of other group members, and that at some point the work of group members is assembled. Conversely, high task interdependence is descriptive of groups in which the tasks of the group require close interaction between-group members.

Providing detail to P4c, task interdependence is a potentially critical moderating variable with respect to the team orientation–LMX differentiation relationship. Specifically, when groups are high in task interdependence, differentiated roles are necessary for efficient group process (Stogdill, 1959). We contend that members in team-oriented cultures are willing to strive for what is best for the group, including acceptance of differentiated roles. Consistent with our contention, the performance of groups that are high in task interdependence increases when groups have been empowered at the team level (Chen et al., 2007; Liden et al., 1997) and in groups characterized by high levels LMX differentiation (Liden et al., 2006).

**P5.** Task interdependence moderates the relationship between team-oriented group culture and LMX differentiation, such that at low levels of task interdependence, the relationship between team-oriented group culture and LMX differentiation is negative, but at high levels of task interdependence, this relationship is positive.

### 3.3. Organization level

#### 3.3.1. Organizational culture

The process by which organizational-level variables influence variables located at other theoretical levels is addressed by multilevel theory, which acknowledges that linkages across levels are stronger for more proximal, included, and embedded entities (Kozlowski & Klein, 2000). Kozlowski & Salas (1997) advanced the term *embeddedness* to describe strong linkages across organizational levels that arise from an alignment between lower level processes and those that originate at higher organizational levels. House et al. (1995) defined inclusiveness as “the proportion of the activity of a unit dedicated to or involved in those of another unit” (p. 89). As members across hierarchical levels in an organization interact, share resources, engage in synchronized and/or standardized activities, and work together to produce outputs, both embeddedness and inclusiveness increases, bringing rise to interdependence across
levels. This interdependence affects the degree to which decisions, normative prescriptions, and other processes which emanate from the organizational-level influences lower level attitudes and behaviors (House et al., 1995; Kozlowski & Klein, 2000).

An example of such a cross-level influence is the effect of organizational-level cultural prescriptions—values and norms prescribed at the organizational level (Schein, 1990)—on individual-level attitudes and behaviors. It is probable that organizational level cultural norms—specifically those that pertain to respect for people, aggressiveness, and team-orientation, have an effect on LMX differentiation patterns. However, the question is whether this effect is more proximal or distal? Following from our preceding discussion, as work groups become more interdependently tied with activity occurring at the macro-organizational level, organizational-level cultural prescriptions are more likely to influence the norms that arise at the group-level. Thus, in many instances, organizational-level cultural prescriptions may influence LMX differentiation, but this effect may often be more distal and mediated by norms and values that operate at the group-level. In sum, we propose a moderated mediation effect to account for the influence of organizational-level cultural prescriptions on processes of LMX differentiation.

**P6a.** There is a positive relationship between organizational-level cultural prescriptions and cultural norms and values operating at the work group level.

**P6b.** Work group-organization interdependence moderates the relationship between organizational-level cultural prescriptions and group-level culture such that this relationship is more strongly positive as interdependence increases.

**P6c.** The influence of organizational-level cultural prescriptions on LMX differentiation patterns is mediated by work group-level cultural norms and values.

### 3.3.2. Organizational design/structure

Organizations that are generally mechanistic (Burns & Stalker, 1961) and highly bureaucratic (Mintzberg, 1981) are characterized by well-defined roles, standardized procedures, and rules designed to promote equality and reduce favoritism (Weber, 1924/1947). In an effort to coordinate centralized decision-making and control, the activity of work groups may be structured such that they are highly interdependent with organizational-level practices in mechanistic organizations. Such dependence increases a work group’s embeddedness in the larger organization and the influence of organizational-level prescriptions on work group activity.

Although “bureaucracy,” or mechanistic structures tend to be perceived negatively by laypersons, this form of organizational design was created to reduce unfairness and bias in organizations through standardization of procedures and clearly specified rules. Rules and procedures often dictate the types of resources to be provided to subordinates as well as how they are to be distributed. Such a high degree of standardization likely limits the extent to which leaders have the latitude to differentiate between subordinates. On the other hand, in organic cultures, types of resources and means of distribution are not specified, suggesting that differentiation may be necessary to achieve optimal levels of flexibility needed in facing dynamic environments. Strict adherence to rules and procedures limits leaders in attempting to reorganize to meet changes in the environment of the organization.

**P7.** The more mechanistic (and less organic) the structure of the organization, the less LMX differentiation.

### 3.3.3. Human resource practices
Human resources policies and practices may influence the degree of LMX differentiation within work groups. Specifically, we propose that the more provisions in place by the human resources department to address employee needs, such as flex-time, sabbaticals, daycare, eldercare, mentoring programs, etc., the less that remains at the discretion of leaders to provide to subordinates in extra-contractual exchanges. Whereas in some organizations, leaders may provide special arrangements to some subordinates (Rousseau, 2005), if the organization already provides such inducements, employees benefit directly from what the organization provides, and rely less on the formal leader.

P8a. The more human resource benefits provided directly by the organization, the less within-group variability in the resources exchanged across LMX relationships.

Because leaders are sensitive to subordinates' professional credentials and potential work contributions when forming LMX relationships (Liden & Maslyn, 1998), it is likely that employment status is related to LMX differentiation. Specifically, contingent employees, such as those who work part-time or on a contract basis may be viewed by leaders as contributing less to a work group's performance than full-time employees. This may partly be due to the fact that leaders tend to be more involved in the selection of full-time employees than contingent employees. When involved in the selection of employees, similarity and liking may influence hiring decisions and subsequent expectations for evaluations of group member contributions. Therefore, we anticipate that full-time, internalized employees are more likely to develop high quality LMX relationships than contingent employees. In organizations with labor practices that include hiring both internalized (full-time) and contingent employees, a greater mix of these differing employment contracts within a group may lead to greater LMX differentiation.

P8b. Human resource practices that include staffing work groups with a mix of internalized and contingent employees generate greater LMX differentiation.

Contingent employees may differ in a critical way. Some like contingent employment because of the flexibility it provides in terms of non-work pursuits or work-family balance, whereas other contingent employees view contingent work as a stepping stone to full-time employment. The latter employees may try especially hard to make a good impression on the leader so as to increase the chances of being presented with the opportunity to join the full-time ranks. Given the motivation to secure full-time employment, these contingent employees may exert considerable effort to develop a high quality LMX relationship (Maslyn & Uhl-Bien, 2001). Workers with no desire to obtain full-time status should be less motivated to pursue a high quality relationship with the leader. It follows that desire for full-time employment is a potentially powerful moderator of the relationship between the use of contingent employees and LMX differentiation.

P8c. The relationship between a mix of internalized and contingent workers and LMX differentiation is moderated by contingent workers' desire for permanent employment, such that a mix of internalized and contract workers is positively related to LMX differentiation when contingent workers do not desire full-time employment, but not related to LMX differentiation when contingent workers are seeking permanent employment.

Finally, in work groups that espouse norms that emphasize the cultural dimension of respect for people, we anticipate less LMX differentiation related to differing employment contracts within the group. In such groups, norms may dictate that leaders pay close attention to stressing human dignity, recognition for accomplishments, concern for individual needs, and empathy. In such cases, it is expected that leaders differentiate less in their behaviors toward subordinates on the basis of their perceptions of
these subordinates' relative contributions to the groups' wellbeing. Contingent employees are less embedded in their groups than internalized (full-time) members. Therefore, group-level norms may be less salient to their behaviors (House et al., 1995; Kozlowski & Klein, 2000). Yet, social interaction is a basic need of individuals (Foa, 1993) and when leaders offer the opportunity for extra-contratual exchanges to contingent workers, these employees may well engage in such exchanges and form high LMX relationships.

**P8d.** The relationship between the employment of a mix of internalized and contingent workers and LMX differentiation is moderated by the cultural dimension of respect for people at the work-group level. When there is a mix of internalized and contingent workers in groups, LMX differentiation is lower when there is a greater emphasis on the cultural dimension of respect for people at the group-level.

### 4. Outcomes of LMX differentiation

The vast majority of research in the LMX literature concerned with the outcomes of LMX relationships has focused on linking individual-level perceptions of LMX quality with subordinate-level outcomes (see Erdogan & Liden, 2002; Gerstner & Day, 1997, Graen & Uhl-Bien, 1995, Liden, Sparrowe, et al., 1997; Ilies, Nahrgang, & Morgeson, 2007; Schriesheim, Castro, & Cogliser, 1999 for reviews). Yet, there is a growing interest in examining implications of the LMX differentiation process for subordinate outcomes. In this section we review research that has attended to outcomes of LMX differentiation and offer directions for future exploration in this area. We focus our discussion on outcomes operating at the individual, group, and organizational levels of theory.

#### 4.1. Subordinate-level outcomes of LMX differentiation

A small number of studies have examined subordinate-level outcomes associated with the LMX differentiation process. This work has typically examined LMX quality at the individual–within-group level (see Table 1 for a detailed definition), conceptualizing differentiation as an overall dispersion of high and low quality LMX relationships within a work group. This work captures the dynamic and interactive process of differentiation—leaders differentiate in their behaviors with subordinates, and this differentiation influences subordinates' attitudes and contributions in their LMX and employment relationships.

Reference group theory provides the theoretical basis for much of this work. When researchers examine LMX quality at the within-group level, they are often exploring how individuals' perceptions of relative standing within their work groups (derived via social comparisons) influences their subsequent attitudes and behaviors. Prior research has suggested that group members are indeed aware of leaders' differential treatment of group members (Duchon, Green, & Taber, 1986; Graen & Cashman, 1975; Sias & Jablin, 1995) and these perceptions may be constructed and/or enforced through communications among members (Sias, 1996).

Using deviation scores (i.e., a member's LMX quality minus the group average LMX quality) Graen, Liden, & Hoel (1982) found a negative relationship between individual–within-group LMX quality and subordinate turnover. Schriesheim et al. (1998), using WABA data analytic techniques (Dansereau, Alutto, & Yammarino, 1984), found that the relationships between LMX quality and SLMX quality (LMX quality measured from the leader's perspective) and the leader's delegation to subordinates and subordinates' performance operated primarily at the individual–within-group level. Furthermore, they found that the relationships between LMX quality and SLMX quality and subordinates' job satisfaction
also operated at the individual–within-group level. These studies suggest that how a LMX relationship compares to other LMX relationships in a group is important to understanding the subordinate-level outcomes of the leader–member exchange.

There have been some inconsistencies, however, in findings generated from research examining LMX quality at the individual–within-group level. Using WABA, Schriesheim et al. (2000) examined the relationships between LMX quality and SLMX quality and subordinate commitment and performance. Their results did not indicate an individual–within-group relationship among these variables. In fact, their results suggested that the relationship between SLMX quality and subordinate performance operated primarily at the individual-level of analysis.

These results paralleled those of other researchers whose findings suggested that LMX quality operates both at the within-group and between-group levels (e.g., Cogliser & Schriesheim, 2000; Markham, Murry, & Scott, 1992), which is generally interpreted within a WABA framework as an individual-level effect. For example, Cogliser & Schriesheim (2000) examined the relationships among LMX quality and work unit cohesiveness, workplace conflict, job autonomy, and skill variety—finding both within and between-group relationships among these variables. Schriesheim et al. (2001) examined the relationship between LMX quality and subordinates' and supervisors' use of strong influence tactics in the relationship. Using WABA, these researchers compared different levels of analysis approaches in their data analysis, finding that the relations between LMX quality and strong influence tactics operated predominantly at the between-dyad level (see Table 2 for clarification). Mixed support also emerged, however, for an individual–within-group interpretation.

Henderson et al. (2008) asserted that given a differentiated group context, LMX processes operate simultaneously at multiple theoretical levels (individual, individual–within-group, and group) to influence outcomes. Using a sample of 31 intact work groups in 4 manufacturing facilities, these researchers found that, when controlling for individual-level perceptions of LMX quality, individual–within-group scores were positively related to subordinate reports of psychological contract (PC) fulfillment. This relationship was strengthened as LMX differentiation increased. Furthermore, they found that PC fulfillment mediated the relationship between individual–within-group LMX quality and subordinate performance and sportsmanship.

These findings suggest that the salience of individual–within-group comparison processes on outcomes may be influenced by group-level LMX differentiation. Individuals' relative standing within their groups may be more salient to shaping their workplace attitudes and behaviors as variability in LMX quality within the group increases. For instance, Erdogan & Liden (2002) argued that when LMX differentiation is high in a group, being closer to the leader offers greater relative advantages and distinguishable treatment. This argument was supported by Henderson et al.'s (2008) findings. When group-level variability is lower, individual–within-group comparisons may not be as important to individuals, and their behavior may be more strongly predicted by social exchange processes tied to individual-level perceptions of overall relationship quality.

P9. Individual–within-group LMX quality is more strongly related to subordinate-level outcomes as group-level LMX differentiation increases.

Most researchers who have examined outcomes of LMX differentiation have used an individual-level measure of LMX quality and appropriate analytical techniques (such as WABA or the computation of deviation scores) to operationalize within-group differentiation. However, explicit measures of perceived LMX differentiation have been developed. Van Breukelen, Konst, & Van Der Vlist (2006)
developed a scale to measure subordinates' perceptions of leaders' differential treatment of group members. They found a significant interaction between individual-level LMX quality and perceived LMX differentiation in accounting for subordinate reports of work unit commitment. Specifically, the relationship between individual-level LMX quality and work unit commitment was more strongly positive when there was less perceived LMX differentiation in the work group.

Hooper & Martin (2008) developed a measure of perceived variability in overall LMX quality. They suggested that individuals rely chiefly on the fairness norms of equity and equality to evaluate situations in their environments. Citing evidence to suggest that equity norms in groups promote competition and disharmony among members while equality norms promote cooperation and relational harmony, they argued that LMX differentiation holds negative implications for members' job satisfaction and wellbeing. The findings of their study supported this assertion. Perceived LMX variability was found to be negatively related to subordinate reports of job satisfaction and wellbeing and positively related to relational team conflict. Relational team conflict mediated the relationship between perceived LMX variability and subordinate job satisfaction and wellbeing.

These findings mirrored those of Schyns (2006) who argued that in groups where there is a higher level of agreement in LMX quality among members, members experience higher levels of job satisfaction and feel more committed to their organizations. She proposed that lower differentiation in the group promotes more cohesive relationships among group members, resulting in these positive workplace attitudes. She examined group-level agreement in LMX quality along the four dimensions of overall LMX quality identified by Liden & Maslyn (1998): affect (liking), professional respect, loyalty, and contribution to mutual goals. Her results suggested that greater within-group agreement along the contribution dimension of the LMX relationship may have promoted higher mean job satisfaction in the group. She did not measure group member relationship quality or cohesion.

4.2. Leader level outcomes of LMX differentiation

As Barnard (1938) suggested, the basic function of leadership is to coordinate the efforts of organizational members in order to accomplish goals that provide some type of valued benefit to the organization and its stakeholders. To coordinate this activity, leaders must acquire some means of social influence, or authority. The LMX model argues that this influence is stronger when derived through processes of social exchange. Social exchange theorists have articulated how this social influence may be earned through dyadic exchanges (e.g., Blau, 1964; Homans, 1961). Yet, researchers have not adequately attended to the implications of LMX differentiation on subordinates' acceptance of this influence.

Homans (1961) labeled the ability to exert influence over a group of others as “authority.” In his theory of social exchange, authority is granted to individuals who win the esteem of their followers. This esteem is gained through providing others with valued rewards (i.e., social exchange). Blau (1964) views credibility as central to the acquisition of influence, as he proposes that individuals will follow a leader's suggestion if they believe doing so will bring greater rewards than following the suggestions of others. Furthermore, Blau's (1964) theory asserts that social exchanges engender unspecified obligations between dyadic partners to repay favorable treatment. In high LMX relationships, which are based upon processes of social exchange (Liden, Sparrow et al., 1997; Liden, Wayne et al., 1997), subordinates may feel greater obligation toward the leader, translating into greater acceptance of the leader's influence.

Beyond individual or dyadic-level perceptions what is occurring (i.e., the social or transactional exchange) in the LMX relationship, subordinates' acceptance of leaders' influence may be affected by
within-group comparisons of differential LMX processes. Extant theory and research point to fairness perceptions as important determinants of subordinates' responses to how their treatment by the leader compares to the treatment of others in the work group (Erdogan, 2001, 2002; Hooper & Martin, 2008; Scandura, 1999; Sias & Jablin, 1995). The group-value model and the relational model of authority (Lind & Tyler, 1988; Tyler, 1989, 2006; Tyler & Lind, 1992) provide a framework that aids in understanding how these fairness judgments may be derived.

The group-value model and the relational model of authority focus on how followers derive procedural justice evaluations of leaders' behaviors and how these evaluations shape their acceptance of leaders' social influence. Procedural justice refers to the perceived fairness of the decision-making and other processes through which individuals in authority allocate resources and punishments to followers. The group-value model asserts that three factors determine individuals' assessments of procedural justice. First, individuals consider whether an authority figure's decisions are made without bias and are based upon factual information. Second, they evaluate the intentions of the decision maker—are they benevolent or perhaps self-interested? Third, they consider how the decision-making and processes of reward and punishment allocation reflects their relative status in groups. Favorable treatment by an authority figure promotes feelings of high-status and is therefore perceived as procedurally just. Unfavorable treatment, however, leads to feelings of low-status within a group, inciting perceptions of procedural injustice. Research has been supportive of the group-value model (e.g., Tyler, 1989) and has shown that procedural justice perceptions are indeed important to followers' acceptance of leaders' influence (Tyler, 2006).

Subordinates' within-group comparisons of their own contributions and receipts (from the leader) in the LMX relationship with those contributions and receipts of other group members facilitate their procedural justice evaluations associated with their LMX relationships. These within-group comparisons may be used to render evaluations of leaders' motives (benevolence/self-interest, biased decision making) in allocating resources and developing relationships within the group. For instance, subordinates may conclude, through within-group comparisons, that the leader is more interested in developing high LMX relationships with individuals who tend to blindly follow (rather than question) his or her decisions. This behavior may be interpreted as self-interested, depending upon the context in which it occurs. On the other hand, subordinates may conclude through within-group comparisons that the leader develops high LMX relationships with those who seek out, most need, or most deserve the additional support derived through these relationships. This behavior may be interpreted as benevolent. Social comparisons also facilitate perceptions of subordinates' relative standing in the group based upon LMX processes (Firebaugh, 1980)—what is viewed as favorable or unfavorable treatment by the leader may be strongly influenced by how others in the group are treated. Thus, individual–within-group comparisons of LMX processes shape subordinates' evaluations of leader bias, benevolence/self-interest, and their relative standing in their groups, thereby influencing procedural justice evaluations of the LMX relationship.

**P10a.** Subordinates' evaluations of leader bias, benevolence/self-interest, and their relative standing in their groups mediate between individual–within-group comparisons of LMX processes and subordinates' evaluations of the procedural justice associated with their LMX relationship. When subordinates perceive they are worse off (from both a resource and overall LMX quality standpoint) than fellow group members, they are more likely to perceive leader bias, self-interest, and low relative standing in their groups, thereby negatively influencing perceptions of procedural justice in the LMX relationship. When subordinates perceive they are better off than fellow group members, they are more likely to perceive
leader non-bias, benevolence, and high relative standing in their groups, thereby positively influencing perceptions of procedural justice in the LMX relationship.

Yet, there is a boundary condition on the degree to which subordinate perceptions they are better off than other members lead to subsequent positive evaluations of leader behavior. Cultural prescriptions operating within the context in which subordinates are nested provide a lens through which subordinates may evaluate the bias, intentionality, and favorability of leaders' exchange behaviors (Blau, 1964; Osborn et al., 2002). When subordinates conclude that the relative treatment they have received by the leader is congruent with prevailing group-level norms, positive intentionality, non-bias, and favorability is more likely to be ascribed to this treatment (Blau, 1964). When they perceive that leaders' differential behaviors (by which they benefit) are not congruent with group norms, they may feel uncomfortable, embarrassed, or even angered. In such cases, they may be less inclined to evaluate leaders as non-biased, benevolent, and take satisfaction in a higher group standing.

As we have discussed, multilevel or meso-models of organizational activity suggest that the social norms most salient to the attitudes and behaviors of employees are those that emanate from more proximal levels. Furthermore, processes of interdependence across levels influence the strength of this linkage. Therefore, it is anticipated that when task interdependence within a group is high, group-level norms relating to resource and reward allocation and other relational processes more strongly shapes subordinates' evaluations of leaders' differential exchange patterns and relationships. The following propositions outline this moderated-mediation process that links individual–within-group comparisons of being better off (from an LMX standpoint) than fellow members and acceptance of leaders' social influence.

**P10b.** Subordinates' perceptions of the congruence of leaders' differential behaviors with group-level cultural prescriptions interacts with individual–within-group comparisons of LMX processes to account for subordinates' evaluations of leader bias, benevolence/self-interest, and their relative standing in their groups. When subordinates perceive that leaders' differential behaviors are congruent with prevailing group culture, there is a stronger, positive relationship between subordinates' assessments, derived via within-group comparisons, that they are better off than fellow members (from both a resource and overall LMX standpoint) and perceptions of leader non-bias, benevolence, and high group standing.

**P10c.** As task interdependence increases in a work group, subordinates' perceptions of the congruence of leaders' differential behaviors with group-level cultural prescriptions more strongly shapes the positive relationship between subordinates' assessments, derived via within-group comparisons, that they are better off than fellow members and perceptions of leader non-bias, benevolence, and high group standing.

**P10d.** Perceptions of leader non-bias, benevolence, and high group standing are positively related to the procedural justice associated with subordinates' LMX relationship.

**P10e.** Perceptions of procedural justice associated with the LMX relationship is positively related to subordinates' acceptance of leaders' social influence.

Subordinates' acceptance of leaders' social influence facilitates the coordination of activity needed to achieve strategic goals. When these goals are realized, leaders are more likely to be perceived as effective and gain further influence (Blau, 1964). These gains in influence may enable a leader to take on
greater responsibility within the organization, moving upwardly in the hierarchy. They may also influence outsiders' perceptions of leaders' effectiveness, thereby affording career mobility.

4.3. Group-level outcomes of LMX differentiation

4.3.1. Group member relationships

Research has just begun to address whether LMX differentiation is beneficial or disruptive to group member relationships. One question surrounding LMX differentiation is whether subgroups or cliques form among group members on the basis of high or low LMX quality. Heider’s (1958) balance theory was advanced by Sherony and Green (2002) as a theoretical framework for responding to this question. In essence, Heider’s (1958) theory suggests that in triads (such as what occurs when two coworkers report to the same leader), individuals strive to achieve a sense of balance in their attitudes toward their partners. Therefore, if, in one work group, coworker A holds a positive relationship with supervisor B, and supervisor B holds a positive relationship with coworker C, then coworkers A and C are more likely to develop a positive relationship with each other. Sherony and Green (2002) found support for this theory. Their results indicated that coworker relationship quality increased as coworkers' similarity in LMX quality grew and decreased as similarity in LMX diminished.

Other researchers have contended that subordinates' perceptions of the fairness of leaders' behavior influences whether LMX differentiation results in marked subgroup formation between high and low LMX members (Scandura, 1999; Sias & Jablin, 1995). In their study, Sias & Jablin (1995) found that subordinates only viewed differential treatment by the leader toward a target member as fair when group members perceived the differential treatment (either favorable or unfavorable) to be warranted by the target member's competence. When group members perceived a target group member as receiving unfair, favorable differential treatment by the leader, they indicated dislike for the target member, decreased their communications with him or her, and became more guarded in their communications with the target, when these communications arose. However, group members who received differential, favorable treatment that was perceived as fair became liaisons between other group members and the leader.

Thus, the findings of Sias & Jablin (1995) indicate that fairness perceptions may influence the degree to which subordinates exhibit preferences for interacting with similar LMX members. Although Hooper & Martin (2008) found some preliminary support indicating that group-level variability in overall LMX quality may have negative implications for subordinate relationships, future research should consider the moderating role of fairness perceptions.

P11. The relationship between group-level LMX differentiation and subordinates' preference to interact and develop stronger interpersonal relationships with members of similar LMX quality is moderated by subordinates' aggregated (group-level) perceptions of the fairness of LMX differentiation. When fairness perceptions are lower, there is a stronger, positive relationship between group-level LMX differentiation and the preference of group members to interact and develop stronger interpersonal relationships with members of similar LMX quality.

4.3.2. Group performance

If marked subgroups between high and low LMX members do arise within a work group, fairness perceptions and the characteristics of the individuals with whom the leader is most strongly tied may influence the implications for this subgroup formation for group performance. Barnard (1938) discussed
a number of potential virtues of informal organizing within a formal organizational structure, such as “the maintenance of the feeling of personal integrity...of independent choice” (p.122). There may be a number of reasons why high and low LMX members form cliques within their groups, and this informal organization does not necessarily mean that group processes suffers. When high and low LMX members form cliques out of choice, rather than out of competitive pressures or leaders' unfair actions, some high LMX members may be able to bridge these cliques. In doing so, they may be able to effectively serve a liaison role and ensure the coordination of efforts in their groups (e.g., Sias & Jablin, 1995).

In one of only two published studies that have examined the relationship between LMX differentiation and group performance, Liden et al. (2006) found that for groups with high task interdependence, the relationship between LMX differentiation and group performance was positive and significant. These authors argued that as interdependence and the need to coordinate activity among group members' increases the differentiation of roles within the group takes on a greater importance. Additionally, results indicated that for groups with low, group-level median LMX quality, LMX differentiation was positively related to group performance. This finding indicates that leaders who are unable to build high quality relationships with a majority of group members might still achieve satisfactory group performance if leaders distinguish among role assignments and develop high quality relationships with at least some group members.

This argument may be dependent, however, on a positive chain of leader–leader vertical relationships within the organization. If leaders do not have high LMX relationships with their superiors, they may lack sufficient resources to grant to their own high LMX subordinates such that these subordinates gain social attractiveness, and associated influence, within the group. Social attractiveness stems from the perception that one holds a resource that is both needed and satisfying to others (Blau, 1964). When social attractiveness is higher, individuals have the ability to gain influence through dyadic social exchanges (Blau, 1964; Homans, 1961). If managers do not have high LMX relationships with their superiors, they may be less able to provide their own high LMX members with the training and developmental opportunities, exposure to network contacts, or other resources that increases these individuals' social attractiveness within the group.

P12. Leaders’ LMX quality with superiors moderates the relationship between-group-level LMX differentiation and group performance in task interdependent work groups. When leaders’ LMX quality with superiors is high, LMX differentiation is more strongly and positively related to group performance in task interdependent groups.

Individual values of subordinates may also influence the effects of LMX differentiation on group performance. Schyns (2006) argued that groups wherein members experience greater agreement regarding the levels of interpersonal affect, professional respect, loyalty, and contribution to mutual goals in their LMX relationships, group performance is enhanced due to interpersonal cooperation. However, she identified a boundary condition for this proposition, indicating that these gains in performance are achieved in groups in which members hold positive work values (such as perceiving that work is a fundamental component of one's life). In groups with negative work values (such as “joyriding”), greater agreement on LMX quality, and subsequently stronger interpersonal relationships among group members may undermine performance. Her results supported her proposition and are consistent with prior research that has found that group performance norms and cohesiveness interact to account for group performance (Berkowitz, 1954; Mullen & Cooper, 1994).
A second boundary condition for the relationship between within-group agreement in LMX quality and group performance, not examined by Schyns (2006) may be group median LMX quality. It is possible that in groups where members are in agreement that they hold low quality LMX relationships with the leader, motivation and subsequent performance may suffer. Future research should explore the relationship between group median LMX quality and within-group agreement in LMX quality as joint determinants of group performance.

4.4. Organizational outcomes of LMX differentiation

There has been little theoretical or empirical attention devoted to organizational-level outcomes of LMX differentiation likely due to the focus of LMX theory on individual work groups (leaders and their direct reports). Yet, the review and extension we have provided points to a number of implications of within-group differentiation on organizational-level outcomes. In this section, we consider the influence of LMX differentiation on three critical organizational outcomes: organizational reputation, labor costs, and organizational performance.

4.4.1. Organizational reputation

Since its inception, LMX theory has followed what might now be referred to as a positive psychological approach to organizational behavior (Fletcher, 2007; Seligman & Csikszentmihalyi, 2000; Snyder & Lopez, 2002). Leaders uncover the potential of their followers, and attempt to tap this potential through the exchange of satisfying resources. In doing so, they motivate what might simply be referred to as “good work” from subordinates—good work that, when aggregated, leads to positive organizational outcomes. However, the meaning of what is “good work” may have different ethical implications across organizational contexts.

While leader support, guidance, and other behaviors that are exchanged across leader-member dyads may take similar symbolic form in differing organizational or regional contexts, their actual content may vary greatly. What might be defined as unethical activity in one context may be acceptable in another, as context determines the types of leader behaviors that are endorsed among followers (House & Javidan, 2004; Hunt, 1991; Osborn et al., 2002; Porter & McLaughlin, 2006). Moreover, mutual engagement in unethical activity may actually be a type of interpersonal coordination that bonds certain leaders and subordinates together. Thus, although LMX differentiation may often work to bring out the best in individuals, it can also bring out the worst—depending upon who is judging the process and outcome and who is engaged in the exchange. Therefore, LMX differentiation may diminish an organization’s reputation given that definitions of ethical and socially responsible activity differ across organizational contexts.

4.4.2. Labor costs

Our review of subordinate-level outcomes of LMX differentiation uncovered very little research that has examined the relationship between within-group differentiation and subordinate commitment. However, commitment is a focal concept in exchange relationships, comprising affective, economic, and normative motives for continuing ties with one’s exchange partner (Meyer & Allen, 1991; Rusult & Buunk, 1993). When subordinates are committed to their organizations, they not only remain, but they are also more likely to engage in efforts that are beneficial to their organizations (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002), leading to a lowered likelihood of involuntary termination. Thus, the influence of LMX differentiation in groups on subordinates' commitment likely influences both voluntary...
and involuntary turnover rates at the organizational level—both of which may affect organizational labor costs.

Meyer & Allen (1991) advanced three types of commitment: affective, continuance, and normative. Affective commitment represents affective attachments to and identification with a partner; when affective commitment is high, individuals remain in relationships out of desire. Continuance commitment is reflective of the costs associated with terminating a relationship; when continuance commitment is high, individuals remain in relationships out of need. Normative commitment has been defined as a perceived obligation to the relationship; when normative commitment is high, individual remain in relationships out of obligation to their partners.

LMX relationships that offer satisfying rewards create obligations to reciprocate, and foster a relational identity should enhance both normative and affective commitment to the leader (Wayne et al., in press). If subordinates perceive that the extra-contractual resources or rewards they receive from their LMX relationships may be difficult to find elsewhere, continuance commitment is also enhanced. Rusbul & Buunk’s (1993) investment model suggests that the satisfaction subordinates experience from within-group comparisons of LMX processes should also influence their commitment to their leaders. When the leader is perceived as a symbolic representative of the organization in the employment relationship (e.g., Tekleab & Taylor, 2003), the commitment one experiences toward the leader should be extended to the organization. Stronger commitment at the subordinate-level to both leaders and organizations may reduce voluntary and involuntary turnover rates at the organizational-level (Cotton & Tuttle, 1986; Graen et al., 1982).

Prior research has suggested that when managers leave, their subordinates may follow (Kacmar, Andrews, Van Rooy, Steilberg, & Cerrone, 2006). This may be particularly true in situations where subordinates are highly dependent upon the leader by virtue of the specific content of extra-contractual exchanges. Therefore, the association between LMX differentiation and labor costs may be dependent upon manager voluntary turnover rates; when these rates are low, effective (i.e., fair) LMX differentiation may reduce labor costs associated with subordinates' voluntary turnover. Additionally, involuntary turnover rates may also be reduced through subordinates' continued receipt of the resources and support they may be reliant upon to excel in their in-role duties. Following from our previous discussions, we offer the following propositions.

**P13a.** Subordinates' fairness perceptions of LMX differentiation interact with individual-level perceptions of LMX quality to account for subordinate commitment to their leaders and organizations. When fairness perceptions are high, the relationship between LMX quality and commitment is more strongly positive.

**P13b.** Manager turnover interacts with subordinate commitment to their leaders and organizations to account for subordinate turnover. The relationship between subordinate commitment and turnover is more strongly negative when manager-level turnover is lower.

Subordinate turnover rates at the organizational level may have a significant influence on organizational-level labor costs—and resulting profits. According to the United States Department of Labor (2008), employee turnover is reflected in an elevation of both hard and soft costs to the organization. The “hard” costs of employee turnover include pre-departure separation processing, overtime for existing employees, hiring search firms or temporary agencies, recruitment advertising, interviewing, and reference and drug screening. “Soft” costs include loss of manager and coworker productivity during the period of a vacancy and new employee training. Even turnover among
employees working in typically low paying jobs can be detrimental to the bottom line. Domino’s Pizza, an international pizza delivery chain, estimates the cost of hourly employee turnover at $2500 per employee and store manager turnover at $20,000 per employee (White, 2005). Thus, as turnover increases (as a result of LMX processes), so do labor costs at the organizational-level.

P13c. LMX processes that elevate subordinate turnover rates (both voluntary and involuntary) at the organizational-level increase organizational-level labor costs.

4.4.3. Organizational performance

When LMX differentiation negatively affects organizational reputation or labor costs, organizational performance may suffer. LMX differentiation may also affect organizational performance by how it influences commitment in top management teams to achieving organizational performance goals. In order for difficult, organization-wide goals to be attained, commitment to achieving these goals must be developed (Klein, Wesson, Hollenbeck, & Alge, 1999; Locke & Latham, 1990). Top-level managers' commitment to organization-wide programs influences their implementation and effectiveness (Rodgers, Hunter, & Rogers, 1993). LMX quality has been positively linked to employee goal commitment (Klein & Kim, 1998); top organizational leaders (such as CEOs) may successfully build this commitment in the top management team through the influence they have acquired as a result of building high LMX relationships.

On the basis of our previous discussion regarding LMX differentiation and leader influence, we anticipate this influence is stronger when top managers perceive that top leaders' (i.e., CEOs) differential LMX patterns within the organizational leadership team are fair. Following from multilevel and meso-theory (House et al., 1995; Kozlowski & Klein, 2000), the interdependence of top managers' behavior with activity that is conducted within the units they manage likely sparks a trickle-down effect whereby their own commitment to achieving strategic goals influences the commitment experienced by the employees in their units. Commitment may travel just as contagiously downward in an organization as do emotions (Barsade, 2002), for example. When top managers are committed, the interdependence between these managers' decisions and the compensation, advancement, and other benefits desired by the members in their units might motivate these members to share in this commitment and work toward achieving organization performance goals.

P14a. Top managers' fairness perceptions regarding LMX differentiation in top management teams interact with top managers' LMX quality in accounting for their commitment to achieving organizational performance goals. As fairness perceptions increase, the relationship between LMX quality and top managers' commitment to achieving organizational performance goals is more strongly positive.

P14b. Top managers' commitment to achieving organizational performance goals is positively related to the commitment experienced by the members in the units they manage to achieve these goals. These members' commitment to achieve organizational performance goals is positively related to attaining these objectives.

5. Implications for practice

Differentiating among workers, as a sound management practice, is gaining steam in the popular business press (Michaels, Handfield-Jones, & Axelrod, 2001). Our review and extension of the literature
pertaining to LMX differentiation point to some important implications for individuals who seek to adopt this style of leadership. We discuss these implications in this section.

When a leader is in charge of a large and diverse group and simply does not have the time or resources to directly reciprocate what they receive from their subordinates, adopting an appropriate leadership style may greatly enhance leader–member relations. Engaging in transformational or servant leadership behaviors may boost subordinates' affect and identification with their leaders and groups (Bass, 1985; Greenleaf, 1977; Liden et al., 2008). By training leaders in these styles, organizations may help foster productive leader–subordinate relationships in large or diverse groups. In addition, by structuring human resource initiatives to include sizeable and diverse benefit offerings to subordinates, employees may come to rely less on leaders and more on the general organization for the attainment of valued resources. Under these circumstances, leaders may also overcome limitations that prevent them from directly reciprocating each subordinate's extra-role contributions and rely more on affect and identification to build high-quality LMX relationships.

Human resource practices that encourage a mix of contingent and internalized employees in work groups may lead to greater LMX differentiation. In these situations, organizations can inspire leaders to differentiate less and form high quality relationships with all subordinates when they stress cultural values that embody a commitment to respecting people. However, organizational leaders must realize that work groups will adopt these values to a varying degree. To ensure the greatest impact of organization-wide adoption of these cultural values, work groups that are not strongly interdependently tied with the larger organization may require special training and follow up monitoring.

Leaders who practice LMX differentiation should understand that their behaviors will be judged against norms of fairness that exist at the work group, organizational, and even regional or market levels. They should pay particular attention to how all of their group members are evaluating their differential behaviors and attempt to align these behaviors with accepted norms of fair behavior. Specialized training for leaders in how employees evaluate and respond to ethical and fair, leader behavior in different contexts may be particularly useful.

6. Future directions

We have identified a number of avenues for building upon our understanding of the antecedents and outcomes of LMX differentiation within a multilevel, or meso-framework. In addition, we offer two general suggestions for future theory development and research pertaining to the LMX differentiation process. First, in Table 2, we acknowledged that LMX processes might be examined at the group-within-organization level of theory. Although we are unaware of any research that has explored LMX processes at this theoretical level, we anticipate it might provide a useful means of accounting for how group-level comparisons of LMX processes may influence outcomes at the individual, group, and organizational levels. For instance, researchers might examine how LMX processes in a group—relative to the LMX processes that are occurring in similar work groups—influence subordinates' perceptions of fair LMX differentiation and subsequent acceptance of leaders' influence attempts.

A second area of future research is related to distinguishing between “differentiation” in terms of relationship quality and the resources exchanged across leader–member dyads in work groups. Relationships represent facilitating conditions for exchange and resources refer to anything exchanged that satisfies a need (Cropanzano & Mitchell, 2005; Foa & Foa, 1974; Glibkowski & Wayne, 2007). Although LMX relationships imply an exchange of resources, researchers have largely neglected to
examine specific exchanges in the leader–member dyad, opting instead to focus on overall relationship quality (high or low) (cf. Liden, Sparrowe et al., 1997; Sparrowe & Liden, 1997).

For example, leaders may develop high LMX relationships with a variety of group members. These high LMX relationships may enhance leader–member communication, resulting in greater leader understanding of each member's unique needs. Consistent with Foa & Foa's (1974) resource theory that each individual is a unique system of needs requiring varying types and levels of resources, a leader may differentially provide resources (e.g., love, status, services, information, goods, and money; resources identified by Foa & Foa (1974)) to high LMX members, indicating greater differentiation in the resources exchanged across leader–member dyads. Therefore, researchers must acknowledge that LMX differentiation implies within-group variability in LMX relationship quality, as well as within-group variability in the specific resources exchanged across leader–member dyads. Future research might draw upon Foa and Foa’s resource theory to examine how differential exchange patterns emerge across leader–member dyads and how these differential exchanges of resources influence outcomes at the individual, group, and higher theoretical levels.

7. Conclusion

We have provided a review and extension of the literature pertaining to LMX differentiation to uncover some of the basic ways in which the activity that transpires across organizational levels (both theoretical and hierarchical) is linked—and how LMX differentiation impacts a leader’s ability to facilitate coordination and value creation across these levels. Our review of the literature uncovered that the LMX model might well be viewed as multilevel in nature and researchers are encouraged to examine LMX processes as operating at multiple theoretical levels in their models. Additionally, we found that research attending to the antecedents of LMX differentiation as well as the resources exchanged across leader member dyads is lacking. Integrating resource theory with the LMX model may be a fruitful means of advancing this line of research. Our examination of the literature shows that research pertaining to the outcomes of LMX differentiation has only begun, and we encourage future researchers to consider the interconnection of outcomes at the individual, group, and organizational levels. A large body of research has explored relationships between individual-level perceptions of LMX quality and subordinate outcomes; it is time to build upon this important work to decipher the consequences of LMX differentiation for leaders, groups, and organizations. This line of inquiry must be undertaken in order to fulfill the promise of meso-models of leadership as a means of understanding how organizational coordination and value creation is achieved.

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