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A MULTI-LEVEL, CROSS-LEVEL EXAMINATION OF LEADER AND TEAM MEMBER OUTCOMES OF LEADER-LEADER EXCHANGE DIFFERENTIATION

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A MULTI-LEVEL, CROSS-LEVEL EXAMINATION OF LEADER AND TEAM MEMBER OUTCOMES OF LEADER-LEADER EXCHANGE DIFFERENTIATION

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For Jennifer.

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ABSTRACT

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Scholars have repeatedly demonstrated the positive benefits of high-quality leader-member exchange (LMX) for employees and organizations alike. Although some research has examined outcomes of differentiation of LMX relationships within teams, there is scant research into the way in which the combination of LMX and LMX differentiation (LMX-D) interact at the leader-level in the workplace hierarchy and the trickle-down effects these leader relationships have on subordinates. Moreover, no research has examined the potential buffering effect that subordinate team LMX may have on leaders who are experiencing the desire to withdraw from the organization as a result of the combination of their leader-leader exchange (LLX) relationships and the LLX differentiation (LLX-D) they perceive on their own leader teams. Thus, the present study sought to combine LMX and multilevel leadership theories to examine the effects of these leader-level exchange relationships on turnover intentions (TOI) for both individuals in leader-member dyads. Results suggested stronger negative relationships between LLX and TOI for both leaders and members when LLX-D is lower. However, examining this relationship at the leader-level when accounting for subordinate team LMX mean suggests that high-quality LMX relationships with the team members supervised by the leader attenuates the negative relationship between LLX and leader TOI. Theoretical and practical contributions are discussed, including the importance of the relationship of LLX, LLX-D, and team LMX mean on employee attitudes at multiple organizational levels.

1. INTRODUCTION

1.1 Introduction

Leader-member exchange (LMX) theory proposes that leaders develop unique, distinct exchange relationships with their subordinates (Dansereau, Graen, & Haga, 1975). High-quality leader-member relationships are believed to extend beyond workplace norms designating the prescribed formality of leader-member relationships to include enhanced exchanges of support and resources for both individuals in the leader-member dyad. Conversely, low-quality exchanges are more formal relationships based on basic contractual "economic" exchanges and limited interpersonal interactions (Graen & Uhl-Bien, 1995; Liden, Sparrowe, & Wayne, 1997). These separate exchange types are believed to evolve naturally in the early stages of employment and are influenced through role-making and role-taking processes as a result of both employee preference and supervisory evaluations of employee ability (Dansereau et al., 1975; Graen, 1976; Graen & Cashman, 1975).

LMX theory suggests that outcomes for the leader may be enhanced through developing high-quality exchange relationships with a few members of the team who then potentially offer important information to the leader (Wilson, Sin, & Conlon, 2010), or enforce the leader's expectations for the team in the leader's absence (Dansereau et al., 1975). The members of this higher-quality "in-group" offer the leader an extended administrative presence within the team as well as structural efficiencies argued by some researchers to be important to group functioning and effectiveness (Dansereau et al., 1975; Dienesch & Liden, 1986; Graen, 1976; Liden et al., 1997). Implicit within this theory is an assumption that leaders will develop positive LMX relationships to a select few within the work group − a process referred to as LMX differentiation (Henderson, Liden, Glibkowski, & Chaudhry, 2009; Liden, Erdogan, Wayne, & Spar-

rowe, 2006). Differentiation in LMX quality between members of a team is a frequent occurrence in work groups (Liden & Graen, 1980), and through social comparison processes (Festinger, 1954), group members are aware of the differential treatment extended by the leader, as well as their own leader-member relationship relative to the rest of the team (Duchon, Green, & Taber, 1986; Graen & Cashman, 1975; Maslyn & Uhl-Bien; Sias & Jablin, 1995; van Breukelen, Schyns, & Le Blanc, 2006).

This led early scholars examining LMX differentiation to suggest that, due to diminished fairness expectations within the team due to perceived inequality between the LMX relationships, differentiation in LMX relationships within a team has a negative impact on team processes (Liden et al., 1997; Scandura, 1999; Sias & Jablin, 1995; Tyler, 1989). Although it is theoretically possible that leaders could avoid differentiated LMX relationships, the reality is that this is not only nearly impossible, but not necessarily desirable. The ability to reconcile the potential benefits of LMX differentiation with the destructive effects of team social comparison processes has become a challenge for LMX researchers (Graen & Uhl-Bien, 1995; Henderson et al., 2009; House & Aditya, 1997; Liden et al., 1997; Scandura, 1999). The existence of LMX differentiation is pervasive, inexorable, and difficult to manage on a large scale. However, LMX differentiation is not always negative, and recent studies investigating the relationship between LMX differentiation and individual and group outcomes in field settings suggest that outcomes of LMX differentiation are neither overwhelmingly positive or negative (Boies & Howell, 2006; Erdogan & Bauer, 2010; Hooper & Martin, 2008; Liden et al., 2006; Wu, Tsui, & Kinicki, 2010).

Although several scholars have posited the possibility of LMX differentiation as a potential boundary condition of LMX (Boies & Howell, 2006; Henderson, Wayne, Shore, Bommer & Tetrick, 2008), little is known about how LMX differentiation may moderate the effect of LMX quality on individual-level outcomes. Drawing on LMX and social comparison theory (Festinger, 1954), I intend to examine LMX differentiation as a moderator of the relationship between LMX and individual-level outcomes. These leader-level functional equivalents of LMX and LMX differentia-

tion will heretofore be referred to as leader-leader exchange (LLX) and leader-leader exchange differentiation (LLX-D), respectively.

The research into outcomes of LMX is extensive, but no research has examined how these relationships operate at the leader-level within an organization. However, there is sufficient extant theoretical and empirical justification to warrant exploration of the impact that leader LLX and LLX-D within a team have on that leader's self-efficacy, emotional exhaustion, and turnover intentions. Research into the relationship between LMX and these outcomes is not novel, but the mechanisms by which they operate at the leader level is.

Employee outcomes resulting from their leaders' upward relationship with their own level-up supervisor (or the organization as a whole) has been explored previously by Pelz (1952) and through the work of subsequent scholars testing what was eventually called the "Pelz effect" (Anderson & Tolson, 1991; Anderson, Tolson, Fields, & Thacker, 1990; Jablin, 1980). Over the past 10 years, the lower level employee outcomes of the Pelz effect have been further studied through the framework of LLX (i.e., the leader's upward exchange relationship). At the member level, LLX has been shown to have significant effects on job satisfaction, employee attitude, and performance (Erdogan & Enders, 2007; Venkataramani, Green, & Schleicher 2010), communication style used to address leaders (Lee, 1998), and perceived organizational support for the lower-level team members reporting to that leader (Tangirala, Green, & Ramanujam, 2007).

Based on the assumption that employees can often be more productive and motivated when working in a team rather than alone (Jones, 1983; Shepperd, 1993; Weber & Hertel, 2007), organizations have continued to structure their workforces into teams (Devine, Clayton, Philips, Dunford, & Melner, 1999; Kozlowski & Bell, 2013; Mathieu, Maynard, Rapp, & Gilson, 2008). Across organizations adapting the team model, teams are often defined as a group of several employees assigned to report to a single leader. Although scholars have suggested that the relationships between the individual members of a team and the leader may influence individual outcomes for that

leader (Wilson et al., 2010), this relationship has not been empirically tested in the context of LLX between the leader and the leader's level-up supervisor. Furthermore, the possibility that a team of subordinates may mitigate negative effects for leaders bearing the brunt of a low-quality LLX relationship has not been tested empirically.

Additionally, drawing on social-learning theory (Bandura, 1977, 1986), "trickle-down" leadership theory suggests that leaders will often emulate the treatment they have experienced from their own level-up supervisor (Bass, Waldman, Avolio, & Webb, 1987). Research on this effect involves the question of whether or not leadership styles "cascade" down from one level to another (Bass, 1990). However, these cascading effects have not been studied in the context of LLX and team-level differentiated LLX relationships, nor has there been adequate empirical investigation into possible attitudinal outcomes of these cascading effects at the member-level, including a particularly important employee outcome − intent to turnover.

1.2 Significance of this Study

My study will offer several contributions to the literature related to leadership and workplace relationships, but will be especially important in elucidating the nature of the leader upward-exchange relationship as a predictor of outcomes at multiple organizational levels. Additionally, despite the number of studies which have examined the antecedents, outcomes, and moderating effect of LMX-D within teams, there has not yet been an empirical investigation of how this construct operates at the leader-level. As seen in Figure 1, my hypothesized model proposes that differentiation between leader-leader relationships (that is, relationships between a supervisor and their own level-up supervisor) is significantly related to attitudes and behaviors of both the leader themselves, as well as the leader's subordinates.

There are a number of previous studies which have examined LMX, LMX-D, and the functional equivalent of LMX occurring one level up in the organizational hierarchy (i.e., LLX). However, none of the research addressing either the Pelz Effect

or LLX have examined leader or subordinate outcomes in the context of an interaction between LLX and LLX-D. Recently, scholars have called for further research on individual outcomes that result from examining LLX-D as a boundary condition between LMX relationships and individual level outcomes (Henderson et al., 2009). I answer this call by examining employee intent to turnover as the result of their leader's exchange relationships.

Additionally, by examining leader-member dyadic relationships that exist at multiple levels within the organization, I will test effects at the individual leader level that have only previously been tested or suggested at the individual member level. For example, while there have been studies which have found connections between a lower-level employee's relationship with the supervisor and a behavioral outcome such as turnover intentions, there have been few recent studies examining the same relationships one level higher in the organizational hierarchy. This study will examine outcomes of leader-leader relationships that researchers have previously tested using only leader-member dyads.

Furthermore, I will build upon the literature that suggests the relationships people have at work may potentially offset either the positive or negative relationship with one's manager. Specifically, I will examine whether, and under which conditions, teams of lower level employees demonstrate support for their supervisor. Additionally, I will study the ways in which team members react to either the positive or negative relationships that their boss shares with their own level-up supervisor.

Finally, I will contribute to the "trickle down" leadership literature which suggests that a leader will often emulate the behaviors they observe from their supervisor with their own subordinates. By observing the existence and strength of differentiation that exists between the leader-leader dyadic relationships for leader teams, and further examining this connection to the degree with which the mid-level leader differentiates in their relationships with their employees, I will be able to explicate on possible implications of these differentiated leader-leader relationships for employees at the lower level of the organizational hierarchy.

2. LITERATURE REVIEW

The aim of this thesis is to develop a deeper understanding of the role that a leader's relationship with their own level-up supervisor, relative to their teammate's relationships, plays in relation to outcomes for both the leader and the employees who report to that leader. As such, I will begin with a discussion of the theoretical development and evolution of LMX. I will offer an overview of relevant LMX constructs and processes which have stemmed from LMX theory, as well as insightful findings using those constructs at multiple levels within organizations. I will highlight relevant research related to my outcome variables of interest and suggest ways in which these constructs and leader-member relationships are related at multiple organizational levels.

2.1 Leader-Member Exchange

Initially proposed over 40 years ago, leader-member exchange (LMX) theory is the principal approach to examining leader-member dyads. Since then, other scholars have followed up with their own contributions to this discussion (Erdogan & Bauer, 2014; Erdogan & Liden, 2002; Liden, Sparrowe, & Wayne, 1997). Since its inception, LMX theory has evolved significantly. What is now referred to as LMX was originally proposed as the Vertical Dyad Linkage (VDL) model. As the original VDL label implies, the theory focused on the dyadic relationship between two employees situated vertically within an organizational hierarchical structure, that is, the relationship between a leader and member (i.e., subordinate).

While a number of contemporary leadership theories examine the effects of leader behaviors on outcomes for the employees or teams which they supervise, LMX theory was developed as a means of understanding outcomes at the member, team,

and organizational levels by examining the leader-member dyadic relationship. In a recent review by Erdogan and Bauer (2014), the authors tell us: "According to the LMX approach, leaders are closer, friendlier, more inclusive, and more communicative with some members who report to them. In other words, leaders form high-quality trust, affect, and respect-based relationships with a subset of their team, while with other members they tend to have a lower-quality exchange that is limited to the employee and the leader's job description." Furthermore, LMX scholars have suggested that LMX quality develops early in the leader-member dyad's workplace tenure (Liden, Wayne, & Stilwell, 1993), and that it plays an important role in shaping not only in-role, but also extra-role behaviors of employees (Gerstner & Day, 1997; Ilies, Nahrgang, & Morgeson, 2007).

LMX theory is rooted in the concept that leaders develop differentiated relationships with their employees (Liden et al., 1997, 2006). It could be argued that a leader could develop exchange relationships of equal quality across all of the members of their team, but due to the commitment of time and energy required to develop these relationships, as well as an even greater commitment to develop high-quality relationships, the reality is that leaders differentiate more often than not (Liden & Graen, 1980). Although some leaders may consciously choose to develop differentiated exchange relationships, differentiation in LMX quality between members of a team is not necessarily an intentional phenomenon, but is theorized to occur naturally as a result of a "role making" process (Dienesch & Liden, 1986; Graen & Scandura, 1987).

2.1.1 Role Theory

The foundation of LMX is built on two important social psychological theories: role theory (Katz & Kahn, 1978) and social exchange theory (Blau, 1964). LMX is based in part on the different roles that develop in leader-member dyads (Graen & Scandura, 1987). Role theory offers a better understanding of how roles are defined in a social environment and the way an individual comes to behave in his or her

role. Work is accomplished through the different roles played by individuals in organizations. Both individuals who make up a leader-member dyad have an interest in the other's role. This is especially true in the case of leaders, who often are actively looking for clues as to how the attitudes and behaviors of the member may help them in achieving their personal leadership goals (Graen & Scandura, 1987).

The process of role-making in the context of a leader-member relationship begins early in employee tenure (Liden, Wayne, & Stilwell, 1993). Although leaders and members initially meet with a "clean slate", the nature of roles is developed and defined as time goes on through a series of exchanges (Steiner, 1997). Additionally, leader-member role development may also exist as part of a trust-building process where each party is likely to pay attention to cues suggesting how much ability, benevolence, and integrity the other person possesses. Research by Bauer and Green (1996) supports these attributes as the major tenets of role making in the context of leader-member relationships. As a result of the possible variability in the role-making process between dyads, some relationships emerge that are of higher quality than others (Erdogan & Bauer, 2014).

2.1.2 Social Exchange Theory

LMX theory is also based on the principles of social exchange theory (Blau, 1964). In leader-member dyads, leaders and members have a vested interest in the potential worth of resources the other may offer, which sets the tone for the exchange relationship. The manifestation of "exchanges" works in tandem with the establishment of roles. Social exchange theory, relying heavily on the norm of reciprocity, plays an important part in accounting for the development, continuance, and outcomes of LMX relationships (Gouldner, 1960). According to social exchange theory, relationships begin and are developed by one party doing a favor for the other, with the other party reciprocating. There is an underlying assumption that exchanges are based on initial effort exerted by an individual, which is then reciprocated through a series of

further exchanges (Maslyn & Uhl-Bien, 2001). Underlying these relationships in a leader-member dyad is an inherent obligation to equitably repay valued and desired treatment by one's exchange partner. This is especially important in situations in which the exchange quality is high (Blau, 1964; Gouldner, 1960). This obligation, or motivation to reciprocate, is often used to account for why high-quality LMX relationships are characterized by higher resource and reward allocation by managers and by greater in-role and extra-role contributions by subordinates (Wayne, Shore, & Liden, 1997). As each party reciprocates favors for the other, trust is built within the dyad (Liden et al., 1993), which further drives the transition of the relationship from a purely "economic exchange" to a "social exchange" (Liden, Sparrowe, & Wayne, 1997).

To summarize, efforts to fulfill roles are represented through exchanges in the anticipation of some sort of reciprocation. The application of role and exchange theories as the foundations to LMX is succinctly described by Liden, Sparrowe, & Wayne (1997): "While LMX theory derives its causal force from role theory, the underlying processes of role formation are held to be, as the name Leader-Member Exchange conveys, those of social exchange" (p. 75).

2.2 Group Aggregate Measures of LMX

2.2.1 LMX Mean

LMX mean is a group-level construct which refers to the mean of each team member's ratings of the quality of his or her relationship with the team leader. Previous research into team LMX mean has explored employees' comparisons of their own LMX scores to team average LMX scores (Klein, Dansereau, & Hall, 1994), and the extent to which differences in individual LMX and the average LMX of a team influences work outcomes. One study conducted by Henderson et al. (2008) found that, when controlling for individual LMX, team average LMX (described as relative LMX quality) was positively related to fulfillment of the psychological contract. There-

fore, the higher the relationship quality all team members had with their leaders, the more likely the individual team members felt their psychological contract with their organization was fulfilled. Mayer, Keller, Leslie, & Hanges (2008) investigated the relationship between co-workers LMX mean, individual LMX, and several outcomes. Their theoretical approach was that because several dyads are embedded in teams, it is likely that social comparison processes influence the relationship between individual LMX and outcomes. Their results suggested that co-worker LMX moderated the relationship between individual LMX and job satisfaction and commitment such that the relationships were stronger for high co-worker LMX rather than low co-worker LMX.

Although the quantity of studies examining LMX differentiation in conjunction with team average LMX is sparse, the results suggest a positive relationship between high team LMX mean and positive employee outcomes.

2.2.2 LMX Differentiation

An important insight offered by Dansereau et al. (1975) is that leaders do not need high-quality relationships with every subordinate, nor do they have the time or resources needed to engage in the behaviors necessary to develop all dyads in a way that would facilitate the highest level of commitment from subordinates. Other early LMX researchers recognized that because of this, leaders almost always develop unique, differentiated exchanges between the members of their teams (Liden & Graen, 1980). This differentiation in LMX relationships is now referred to as LMX differentiation (LMX-D).

Henderson et al. (2009) defined LMX differentiation as the "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" (p. 519). In other words, LMX-D refers to differences across dyads in work groups that result from dynamic and interactive exchanges that occur between leaders and

members. Generally, LMX-D is considered a group-level construct (Boies & Howell, 2006; Liden et al., 2006; Naidoo, Scherbaum, Goldstein & Graen, 2011; Stewart & Johnson, 2009), because it "captures the degree to which leader-member relationships within a work group differ" (Ma & Qu, 2010, p. 734).

It is only recently that differentiation itself became a construct of interest within LMX research. Recent studies examining LMX-D have focused on the outcomes of LMX-D processes. A small number of studies have examined subordinate-level outcomes associated with LMX-D. Liden, Erdogan, Wayne, and Sparrowe (2006) showed that when task interdependence was high, greater LMX-D was positively related to task performance. Stewart and Johnson (2009) showed that in teams with high gender diversity, LMX-D was positively related to team performance. However, Hooper and Martin (2008) suggested that LMX-D is negatively related to job satisfaction and well-being due to its positive relationship with team conflict.

Other studies have shown that LMX-D is negatively related to group level job satisfaction and commitment (Schyns, 2006), and positively predicted inflation in performance ratings (Ma & Qu, 2010). Liao, Liu, and Loi (2010) showed that LMX quality was more positively related to self-efficacy and creativity in teams with low LMX-D. Many studies which examine the influence of LMX-D on individual and group outcomes also recognize and test the importance of LMX mean. Boies & Howell (2006) showed that, when coupled with high team LMX mean, differentiation was associated with higher team potency and lower team conflict. These results suggest that LMX-D does not have unequivocally positive or negative effects on team or individual processes.

2.3 Leader-Level Functional Equivalents of LMX

Although the relationship that a supervisor shares with their own supervisor was identified as an important contextual feature in the literature on early vertical dyad linkage theory (Cashman, Dansereau, Graen, & Haga, 1976; Graen, Cashman, Gins-

burg, & Schiemann, 1977), this concept has been largely ignored until the early 21st century. Early research on upward influence, later referred to as the "Pelz effect" (Jablin, 1980), suggested that a supervisor's upward relationship with his or her own supervisor may not only have implications for the supervisor, but also for those connected proximally within the supervisor's workplace network.

2.3.1 The Pelz Effect

Twenty years prior to the earliest LMX studies, Pelz (1952) discovered that when a supervisor has more upward influence (e.g., job autonomy and a voice in their superiors' decisions), the members of the work group reporting to that supervisor were more satisfied with their supervision. Jablin (1980) subsequently called the effect of the supervisor's upward hierarchical influence on the group members' attitudes and behaviors the "Pelz effect." A few years following the work of Pelz, Likert (1961) conceptualized the Pelz effect as a critical "linking pin" for managers, or the means by which the team of employees reporting to the manager connect to the larger organization. This occurs through the supervisor who facilitates the flow of communication, influence, and rewards both between and within the group (Graen et al., 1977). The Pelz effect is one of the few relationships that links the employee to the organization through the leader's behavior (Anderson et al., 1990). The leader essentially acts as the channel by which social and material resources within organizations are directed to their subordinates. Because leaders fulfill this important "linking pin" role, the quality of the leader's relationship with their own supervisor is an important determinant of the resources available for the leader's team of subordinates (Argyris, 1964; Graen, Dansereau, & Minami, 1972; Likert, 1961, 1967; McGregor, 1960).

Several studies have confirmed the existence of the Pelz effect (Anderson & Tolson, 1991; Anderson et al., 1990; Jablin, 1980). For example, Jablin (1980) discovered that when superiors had upward influence with their bosses in strategic areas (e.g., decisions related to policy matters) as well as in work-related areas (e.g., decisions

related to work assignment, methods, and performance review), their subordinates reported higher levels of satisfaction and openness with superiors. Anderson et al. (1990) found that the amount of a leader's upward influence moderated his/her own considerate, supportive behavior and task-oriented behavior toward his/her subordinates. This thesis extends upon previous work related to the Pelz effect and explores a more recent variation of the Pelz effect known as leader-leader exchange.

2.3.2 Leader-Leader Exchange

For the past ten years, the research into the implications of the LMX quality a leader has with their own supervisor one level up has been labeled leader-leader exchange (LLX; Tangirala, Green, & Ramanujam, 2007), although the concept bears a strong resemblance to the Pelz effect (Graen, Cashman, Ginsburg, & Schiemann, 1977). However, it should be noted that while the studies originally performed by Pelz examined variables such as leader job autonomy and leader's voice in level-up leader decisions in order to conceptualize leader's upward influence, LLX is simply a functional equivalent of LMX applied one level higher in an organization. As such, the theory underlying LLX is identical to that of LMX, so the LLX construct may − for the most part − be tested and treated the same as LMX.

LLX may be described as the relationship-based functional equivalent of LMX which develops through a series of recurring interpersonal exchanges between supervisors and their own respective supervisors (Tangirala et al., 2007). Supervisors act as "linking pins" in organizations by connecting employees lower in the hierarchy to the upper management (Argyris, 1964; Likert, 1961). In fact, organizational structures can be represented as several convergent chains of dyadic relationships connecting the organization's top manager with the frontline employees. Each link of those chains has a superior who oversees top-down flow of budgets, information, and influence to a subordinate (Graen, Dansereau, & Minami, 1972). Given this network of dyadic relationships, it is conceivable that the supervisor's relationship with his or her boss

(i.e., LLX) has important implications for subordinates lower in the hierarchy. Once such a relationship is developed, it becomes relatively stable and dictates the quality of social exchanges between leaders and their own level-up supervisors (Cropanzano & Mitchell, 2005).

LLX, like LMX, is typically characterized by mutual trust, respect, obligation, and goal commonality shared between supervisors and their own level-up supervisors (Dienesch & Liden, 1986; Liden & Graen, 1980). When a leader has high-quality LLX with their own supervisor, that supervisor is more likely to trust and respect them, and feel a sense of obligation to facilitate their further development (Graen et al., 1977; Graen & Uhl-Bien, 1995). Therefore, it is plausible that the quality of LLX is related to the amount of resources that the upper level management team is willing to bestow to supervisors in the "linking pin" positions.

Since the inception of the term LLX, a small number of studies have examined LLX as a variable of interest − most of which find a number of significant effects for LLX. For example, Lorinkova and Perry (2014) found that a positive relationship between leader empowering leadership and employee psychological empowerment was significant only in situations in which the leader shared a high-quality exchange relationship with his or her own boss. Erdogan and Enders (2007) found that the leader's perceived organizational support − a construct strongly related to LLX − strengthened the positive effects of LMX on lower-level employee satisfaction and performance. Venkataramani, Green, and Schleicher (2010) showed that higher LLX results in greater status for the leader as perceived by lower-level employees, resulting in more favorable job attitudes. Tangirala et al. (2007) showed that LLX strengthens the relationship between lower-level employee LMX and organizational identification and perceived organizational support. These studies support the idea that a leader's relationships with higher-level employees have the potential to affect employees one level below, particularly on attitudes that are strongly related to withdrawal such as perceived organizational support (Tangirala et al., 2007), job satisfaction (Erdogan &

Enders, 2007; Venkataramani et al., 2007), and turnover intentions (Venkataramani et al., 2007).

2.4 Employee Withdrawal

There are a number of factors which might determine an employee's decision of whether or not to withdraw from their organization. For example, the strength and quality of relationships with co-workers and leaders may act as an "affective force" in regards to turnover decisions (Maertz & Griffeth, 2004). Additionally, the number of relationships that an individual has with others at work has been shown to be one force that connects an individual to their organization (Mossholder et al., 2005). At the core of LMX is the idea that a high-quality leader-member relationship provides affective benefits to team members. These benefits subsequently motivate an employee and maintain his/her commitment to the leader (Liden & Maslyn, 1998). Because of this connection with the leader, high-quality LMX employees have been shown to be less likely to leave the organization (Bauer et al., 2006).

In addition to proposing an "affective force," Maertz and Griffeth (2004) also argue that the existence of a "calculative force" binds an individual to an organization. This calculative force is based on the employee's perceived combined benefits resulting from high-quality LMX relationships. These combined benefits may be manifest in the form of extra resources to perform tasks, protection, career advancement, wage increases, job latitude, mentorship opportunities, and affection (Graen & Scandura, 1987; Liden & Maslyn, 1998; Sparrowe & Liden, 1997). If the theoretical sum of these benefits in the current role does not outweigh the perceived alternatives of moving to another organization, the employee will be more likely to leave the organization (March & Simon, 1958; Mobley, Griffeth, Hand, & Meglino, 1979). Likewise, high-quality LMX members have been shown to be less likely to leave the organization (Graen, Novak, & Sommerkamp, 1982).

This thesis contributes to research examining the relationship between LMX and turnover intentions (TOI). Several studies have linked LMX quality to turnover intentions. In a meta-analysis, Gerstner and Day (1997) found a positive relationship between LMX and turnover intentions. The same meta-analysis revealed a nonsignificant relationship with actual turnover, but at the time of the meta-analysis, there were only a handful of studies linking LMX quality to actual turnover. A more recent meta-analysis examining turnover as a consequence of LMX revealed a slightly negative relationship between LMX and turnover across 9 studies (Dulebohn et al., 2012). This is not surprising due to a number of inconsistent findings regarding the LMX and turnover relationship. For example, Graen et al. (1982) found that IT workers with higher-quality LMX relationships with their leaders were less likely to turnover; Ferris (1985) replicated these findings using a sample of nurses in a healthcare setting. Conversely, in a study designed to replicate these findings, Vecchio (1985) reported no support for the proposed relationship among a sample of bank tellers. Vecchio, Griffeth, and Hom (1986) later reported limited support for the predicted relationship, but the effect sizes were so small that the authors concluded that no significant relationship was present between LMX and turnover. These results suggest that effects of LMX on turnover behavior are inconclusive with "not enough evidence to support strong correlations between LMX and the objective outcomes of performance and turnover" (Gerstner & Day, 1997, p. 835).

Based on the aforementioned literature, it is clear that studies of this relationship are not novel. However, researchers know very little about how LMX operates at the leader level. While LMX as a significant predictor of turnover may be contingent upon contextual factors, LLX will be more straightforward as a driver of turnover intentions. I posit that this is due to the nature of the leader role. Employees engaged in a leadership position are likely to be more embedded in their jobs. Job embeddedness has been shown to have a negative relationship with employee decisions to turnover (Mitchell et al., 2001). Accordingly, those employees who are both engaged in high-quality exchange relationships and are strongly embedded in their jobs share

a relationship with their manager which has positive implications for employee autonomy, growth, and effectiveness.

Sturges, Conway, and Liefooghe (2010) also showed that high-quality LMX members are less likely to manage their careers by turning to external strategies, possibly because these employees tend to believe that they can reach career goals within their current organization (Benson & Pattie, 2009). Therefore, those employees who function as leaders will be more embedded within their jobs. Finally, as a result of the advantages of being in a positive, productive, trust-based relationship with one's leader, I also expect that employees in leadership positions with higher LLX will exhibit a greater desire to remain in their organization.

Hypothesis 1: LLX will be negatively related to leader turnover intentions.

2.5 The Moderating Role of LLX Differentiation

The previous discussion on employee withdrawal behaviors suggested that the relationship between LMX and TOI is likely moderated by a number of possible contextual variables. For example, Bauer, Erdogan, Liden, and Wayne (2006) reported a negative main effect for LMX on turnover that was moderated by extroversion, lending credibility to the importance of further examining moderators within this relationship.

In a multilevel review of the antecedents and outcomes of LMX-D, Henderson et al. (2009) proposed that individual-within-team LMX quality is more strongly related to subordinate level outcomes as team-level LMX-D increases. This proposition is supported by a number of studies, many of which were briefly mentioned as part of the previous discussion of recent findings regarding LMX-D outcomes. These findings suggest that the salience of individual team member comparison processes on outcomes may be influenced by team LMX-D. In other words, an employee's relative standing within their team may be more substantial to shaping their workplace attitudes and behaviors as team LMX-D increases. As an example, Erdogan and Liden

(2002) suggested that when LMX-D is high within a team, having a closer relationship with the leader offers greater advantages and special treatment relative to the rest of the team. Conversely, when team LMX-D is lower, team member comparisons may not be as important to individuals, and their behavior may be more strongly predicted by social exchange processes tied to individual perceptions of their own LMX quality.

A motivational benefit of LMX-D is the opportunity that it implies regarding the potential to develop or maintain higher quality relationships with the team's leader (see also Liden et al., 2006). Regardless of the level of team LMX mean, undifferentiated LMX within a team might suggest to the team members that the leader is unwilling or unable to develop distinct relationships with employees. In teams with little perceived LMX-D, members may believe that, if there is no opportunity to develop distinct high-quality exchanges with their leader, then there is little to work for. However, in a team in which members perceive high LMX-D, these members may believe that increases in effort have the potential to result in high-quality LMX. In this way, LMX-D signals to team members the possibility of increased time, information, and rewards from the leader, and provides an incentive for team members to work towards developing a higher-quality relationship with their leader. This is not likely to be the case when leaders do not differentiate strongly between their team members.

Applying LMX theory one level higher in the organizational hierarchy as to examine it at the leader level (i.e., examining LLX and LLX-D) and drawing from social comparison theory (Festinger, 1954), I propose that LLX-D will moderate the relationship between LLX and leader turnover intentions. According to social comparison theory (Festinger, 1954), individuals compare themselves with others in order to develop their self-concept, especially in situations in which there is a lack of specific ways to understand their own state. Working in the same team offers team members a myriad of individual attributes which could be used as conduits for making social comparisons (Tse et al., 2012). Team members are aware of the differential treatment

of group members by the leader and their own leader-member relationship relative to the rest of the team (Duchon, Green, & Taber, 1986; Graen & Cashman, 1975; Maslyn & Uhl-Bien, 2001; Sias & Jablin, 1995; van Breukelen, Schyns, & Le Blanc, 2006).

Communication between team members serves as a means to enforce and/or support inter-team perceptions of differentiation. For a number of self-presentation and developmental reasons, leaders will have a strong motivation to compare their LMX relationship to that of their leader peers. Subsequently, individual leaders who report to the same common supervisor are likely to judge their LMX relationships relative to what they observe from their co-workers. Because LMX-D can be interpreted as "an indicator of a member's status within a group" (Liden et al., 2006; p. 726), the degree of differentiation in leader-member relationships within a team can offer valuable information to an employee engaged in social comparisons (Liao et al, 2010).

In situations where LLX-D is high on a leader team, as a leader's LLX quality increases, the leader may perceive that their role on the team is more highly respected or valued compared to others (Liao et al., 2010). Organizations may signal to certain employees that they have reached a certain level of "insider" status by suggesting offers which may be particularly important to leaders, such as increased benefits, additional training, or promotions (Stamper & Masterson, 2002). The leader who enjoys a high-quality LLX relationship on a team with high LLX-D will be more likely to recognize the value that they have, relative to the rest of the team. As a result, the leader will remain more involved in the organization and will be less likely to vacate their position.

On the other hand, in a team in which LLX-D is low, the leader is likely to observe that their level-up leader is impartial in regards to the quality of the relationships they develop with their subordinates (Liden et al., 2006; Duchon, Green, & Taber, 1986; Graen & Cashman, 1975; Maslyn & Uhl-Bien, 2001; Sias & Jablin, 1995; van Breukelen, Schyns, & Le Blanc, 2006). This results in the leader recognizing that, when compared to other team members, they are no more highly valued or worthy of

the benefits that insiders receive when stacked up to their fellow leader team members (Stamper & Masterson, 2002). They may recognize that, even if they exert more positive workplace behaviors than their colleagues, they will not be able to develop a higher quality LLX.

Because high-quality LLX offers a number of potential benefits for leaders attempting to advance their careers, if leaders are in a situation where they believe their efforts will not be rewarded by better treatment compared to their coworkers, they will choose to withdraw from the workplace, opting instead to pursue employment with an organization that will give them the opportunities they seek. These opportunities may only be available in a team with high LLX-D. In other words, in the presence of low LLX-D, the proposed strong effects of LLX on withdrawal intentions will weaken.

Hypothesis 2: LLX-D will moderate the relationship between LLX and leader turnover intentions such that the relationship will be stronger in teams where LLX-D is higher than when LLX-D is lower.

2.6 Team LMX Mean

Leaders have subordinates who report to them and can provide support, and one possible source of support is a high-quality LMX relationship (Ashkanasy & Tse, 2000). Specifically, Erdogan et al. (2004) argued that LMX is an important source of support that can help employees cope with work challenges. Their findings indicated that high levels of LMX could buffer employees from work stress and help them adjust to the work environment (Erdogan et al., 2004).

Research on "trickle-down" effects in organizations describes how interactions at a higher level in an organization affect perceptions and behavior at lower levels, and has been used to describe outcomes of leader-member relationships (Tepper & Taylor, 2003). Although most research examining trickle-down models has focused on positive managerial behaviors (Bass, Waldman, Avolio, & Bebb, 1987; Mayer,

Kuenzi, Greenbaum, Bardes, & Salvador, 2009), more recent research using these models has begun to describe the impact of negative aspects of leadership (Aryee, Chen, Sun, & Debrah, 2007; Hoobler & Brass, 2006; Mawritz et al., 2012; Tepper, Duffy, Henle, & Lambert, 2006). Employees are more likely to respond to negative situations than positive ones (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001).

As an example, in a study testing the possible moderating effect of LLX on the relationship between inter-team LMX differentiation and group teamwork behaviors, Herdman, Yang, and Arthur (2014) found that LMX differentiation was more positively related to group teamwork behavior in circumstances in which LLX was low than when LLX was high. These results suggest that in teams in which members recognize the low LLX relationship between their boss and his or her supervisor, team members may become less disenfranchised by disparity in perceived intra-team LMX and therefore engage in more cooperative teamwork behaviors. As mentioned in the previous section, high-quality LMX relationships may operate as a source of support (Ashkanasy & Tse, 2000), helping employees cope with work challenges (Erdogan et al., 2004). This supportive outcome of LMX has not yet been tested in the context of a group of subordinates offering support to a supervisor, but an examination of this possible relationship would offer considerable insight into antecedents of team behavior.

Consistent with the aforementioned theory, I expect similar findings when examining team LMX mean as a means of offsetting negative outcomes resulting from the LLX and LLX-D interaction. That is, I expect that in a situation in which a leader has a low LLX relationship and is on a team in which LLX-D is high, an overall positive relationship with their subordinate team will attenuate the strong relationship between the LLX and LLX-D interaction and the leader's intent to withdraw.

Hypothesis 3: Team LMX mean will further explain the two-way interaction between LLX and LLX-D (i.e., H2) such that team LMX mean will weaken the negative effect of LLX on leader turnover intentions in leader teams with high LLX-D.

2.7 Mediators of the LLX and Turnover Intention Relationship

Previous studies investigating the link between LMX, turnover intentions, and actual turnover have had a distinct focus on the mediating factors of this relationship, attempting to elucidate the processes which lead to turnover as a result of LMX. A broad range of mediator variables have been investigated, including job embeddedness (Harris, Wheeler, & Kacmar, 2011), organizational commitment (DeConinck, 2009, 2011), and job performance (DeConinck, 2011). None of these studies have examined this mediating relationship at the leader-level. In an effort to fill this gap, I have chosen to investigate leadership self-efficacy and leader emotional exhaustion as mediators of the leader LLX, LLX-D, and team LMX mean interaction and turnover intention relationship.

2.7.1 Leadership Self-Efficacy

Self-efficacy, conceptually defined as "people's judgment of their own capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1986, p. 391), is a principal form of cognitive evaluation that directs the behaviors of individuals. Self-efficacy is concerned with whether the skills one possesses can be leveraged to achieve desired outcomes (Maddux, 1995). These beliefs, at the individual level of analysis, provide the foundation for human motivation, well-being, and personal accomplishment, and efficacy expectations determine the amount of effort people will exert in the face of aversive circumstances (Brooks, 2010). Within teams, the social comparison process resulting from LLX-D provides an important source for forming self-efficacy beliefs (Greenberg et al., 2007).

Drawing on social comparison theory, individuals are likely to socially compare with others who are believed to be better off (i.e., upward comparison; Festinger, 1954), or compare with others who are worse off (i.e., downward comparison; Hakmiller, 1966). Research has demonstrated that, although greatly influenced by contextual factors, people who engage in downward comparisons experience more positive

feelings (Lyubomirsky & Ross, 1997) and are more confident about themselves (Hakmiller, 1966). Conversely, people who make upward comparisons discover that they are of lower standing relative to others, which reduces their positive self-image and decreases self-efficacy (Maslach, 1993).

A number of studies have examined the impact that leadership has on the efficacy of their employees. Rosenthan and Jacobson's (1968) classic research on the "Pygmalion Effect" demonstrated how the perceptions of a leader can impact a group and its performance. They found that teachers who believed that a set of students had higher ability when compared to other sets of students invariably attended more to these students, expressed more satisfaction with their performance, encouraged and praised them more, and communicated with them on a more frequent basis. More recently, Livingston (1988) noted how the Pygmalion Effect is applied in management. That is, the Pygmalion Effect in managers can undermine or enhance staff performance when subtle communication and recognition are offered, either consciously or unconsciously. Expectations from managers placed on employees may reflect a tendency for employees to confirm, rather than disconfirm, positive beliefs that others have about them (Bass, 1985). Since leaders often recognize and reinforce desired behaviors, their influence can shape (either positively or negatively) employee behaviors toward organizational goals. For an employee in a leadership position, positive behaviors and affirmation directed from the supervisor indicate a recognition of the existence of leader-like traits.

Research centering on leadership self-efficacy originated from the aforementioned work of scholars who sought to explore the role of efficacy in organizations. Developed through a foundation in the theory underlying self-efficacy, leadership self-efficacy (LSE) refers to the "[l]eaders' beliefs in their perceived capabilities to organize the positive psychological capabilities, motivation, means, collective resources, and courses of action required to attain effective, sustainable performance across their various leadership roles, demands, and contexts" (Hannah, Avolio, Luthans, & Harms, 2008). There is a growing collection of evidence demonstrating that leadership self-efficacy

is a significant driver of work outcomes, including ratings of leader and manager effectiveness or performance (Chemers, Watson, & May, 2000; Luthans & Peterson, 2002; Prussia, Anderson, & Manz, 1998; Robertson & Sadri, 1993), and organizational performance (Wood & Bandura, 1989). Examining organizational commitment, Paglis and Green (2002) found that leaders high in leader self-efficacy were more likely to be committed to the organization, and therefore less likely to withdraw. Furthermore, in a study examining the relationship between mentor/protege relationships and leadership self-efficacy development, Lester et al. (2011) found that mentoring interventions determined increases in leadership self-efficacy to a greater extent than group classroom leader development interventions. Additionally, they found that higher levels of trust between the mentor and protege − one of the central tenets of LMX quality − were associated with increases in leadership self-efficacy. These results suggest that leader self-efficacy is an important component in the decision of a leader to remain within an organization. Leadership self-efficacy can be effectively developed as a part of the social exchanges and roles manifest through the development of LMX, and that leadership self-efficacy will then determine whether or not the leader decides to remain employed in an organization. Furthermore, the nature of the overall LMX relationship that the leader shares with the teams they supervise will further function as a means to bolster or undermine the leader's efficacy beliefs regarding their leadership ability. That is, higher-quality LMX relationships with the team as a whole will support a leader's notion that he or she is fulfilling their leadership role well, or conversely low-quality LMX relationships with their teams will communicate to the leader that he or she is not adequately filling the leadership role, lowering their leadership self-efficacy, resulting in intent to withdraw from the organization.

Hypothesis 4a: The three-way interaction of LLX, LLX-D, and team LMX mean on leader turnover intentions (i.e., H3) will be partially mediated by leadership self-efficacy.

2.7.2 Emotional Exhaustion

Research on emotional exhaustion developed from Maslach's (1982) model of burnout, in which burnout was made up of three parts: emotional exhaustion, depersonalization, and personal accomplishment. The first of these parts, emotional exhaustion, is described as a "chronic state of emotional and physical depletion" (Cropanzano et al., 2003). As Demerouti, Bakker, Nachreiner, & Schaufeli (2001) suggested: "Emotional exhaustion closely resembles traditional stress reactions that are studied in occupational stress research, such as fatigue, job-related depression, psychosomatic complaints, and anxiety" (p. 499). Given these observations, it is reasonable to suggest that emotional exhaustion is a type of strain that results from workplace stressors.

Several researchers have theorized the relationship between emotional labor and withdrawal behaviors (Abraham, 1999; Brotheridge & Lee, 2002; Grandey, 2000; Rubin et al., 2005; Zerbe, 2000). For example, Brotheridge and Lee (2002) suggested that employees that lack the resources to perform tasks required by the job will be more likely to turnover in order to cease further drain in emotional resources. Similarly, Grandey (2000) suggested that "emotion management" leads to an increase in physiological arousal, which then could potentially impact withdrawal. Research in applied settings has provided evidence of a positive relationship between emotional exhaustion and actual turnover, such that employees who are emotionally exhausted are likely to withdraw from work (Babakus et al., 1999; Cropanzano et al., 2003; Lee & Ashforth, 1996; Singh et al., 1994; Wright & Cropanzano, 1998).

As an example, Cropanzano et al. (2003) found that emotional exhaustion had a strong positive relationship with turnover intentions. Furthermore, in a meta-analytic review, Lee and Ashforth (1996) found a strong positive relationship between emotional exhaustion and turnover intentions. However, no research has examined the relationship between LMX, emotional exhaustion, and turnover intentions in a single theoretically-driven model at the leader level. Therefore, my current study extends

previous literature by incorporating leader turnover intentions as an outcome of LLX, LLX-D, and team LMX mean, mediated by the emotional exhaustion of the leader.

In addition, researchers have suggested that high-quality LMX relationships can operate as a source of support (Ashkanasy & Tse, 2000). Specifically, Erdogan et al. (2004) argued that LMX is an important source of support that can help employees cope with work challenges. Their findings indicated that high levels of LMX could buffer employees from work stress and help them adjust to the work environment (Erdogan et al., 2004). Furthermore, Harris and Kacmar (2005) demonstrated that LMX plays an important role in the relationship between perceptions of politics and strain in the workplace. They argued that, by providing high levels of trust, rewards, and continuous emotional support, supervisors can buffer the negative effects of politics on work strain. Consistent with their arguments, they found that relationship exchange quality moderated the relationship between perceptions of politics and strain in a manner that employees with higher quality LMX relationships had a weaker positive relationship between perceptions of politics and strain in comparison to employees with lower quality (Harris & Kacmar, 2005). These results suggest the importance of the LLX relationship and LLX comparison processes in determining the emotional exhaustion faced by employees. Furthermore, these findings also suggest the importance of considering the supportive role that collective subordinate team LMX may play in determining the attitudes and beliefs of the mid-level leaders. I therefore suggest that there is not only significant relationships between the LLX and LLX-D interactions in determining the emotional exhaustion of leaders, but that the LMX shared with the leader's team of subordinates will also play a part in this outcome. Furthermore, the emotional exhaustion that a leader faces in their work will then lead to an intent to turnover.

Hypothesis 4b: The three-way interaction of LLX, LLX-D, and team LMX mean on leader turnover intentions (i.e., H3) will be partially mediated by leader emotional exhaustion.

2.8 Member Outcomes

When an employee has a leader in a high-quality LLX relationship, the employee is likely to believe that they have greater access to a wide variety of resources that may not be readily available to other employees in the organization (Cashman, Dansereau, Graen, & Haga, 1976; Graen & Scandura, 1987; Sutton & D'Aunno, 1989). For example, such leaders may hear about important policies and decisions faster than fellow peers, or have more upward influence in negotiating better outcomes and rewards for themselves and the team members who report to them (Cashman et al., 1976; Pelz, 1952). Social exchange theory also suggests that the level-up supervisors of leaders with high-quality LLX may interfere less with the leader's decision making, be more receptive to suggestions and concerns raised by these leaders, allow them to have a greater role in important organizational decisions, and offer greater negotiating latitude in their everyday work (e.g., Graen et al., 1977). As a result of these varied benefits accrued from high LLX, members are likely to view leaders who belong to their own level-up supervisors' in-group as having greater authority, influence, and/or status (Dienesch & Liden, 1986; Fernandez, 1991).

As Cashman and colleagues expressed,

"When a superior develops a [high-quality LLX] relationship with his boss, those members reporting to such a superior share his good fortune. In contrast, when a superior fails to develop a [high-quality LLX] relationship with his boss, those members reporting to him also must suffer his misfortune" (1976: 293).

Both social learning theory (Bandura, 1977; Liu, Liao & Loi, 2012) and social information processing theory (Salancik & Pfeffer, 1978) have been used in trickle-down models to explain how individuals interpret events and learn how to behave from the cues in their environment (Mawritz et al., 2012). Trickle-down models link employees' attitudes and behaviors to the behaviors of management based on how these managers are treated themselves, and in turn how they treat their employees (Mawritz, Mayer, Hoobler, Wayne, & Marinova, 2012). There is evidence suggesting that these

trickle-down leadership effects are manifest as a result of employees in leadership positions emulating the behaviors of their own bosses in their interactions with their subordinates (e.g., Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009; Zohar & Luria, 2005). Therefore, it is likely that if a team member is supervised by a leader with a high-quality LLX relationship, the leader will treat their subordinates in much the same manner as they themselves are treated, resulting in a positive relationship between the subordinate and their leader. Scholars have posited that the availability of a leaders trust, support, and feedback would be limited if they themselves had not been provided the same resources and support from their level-up leader (Tangirala, Green, & Ramanujam, 2007; Zhou, Wang, Chen, & Shi, 2012). These trickle-down effects make it unlikely that supervisors with low LLX relationships would invest the time and energy necessary to develop high-quality LMX with their subordinates. Along these lines, I extend my previous arguments by asserting that the leader's LLX relationship has ramifications for member outcomes, such as job satisfaction and turnover intentions. For example, if an employee has a high-status leader with a high-quality LLX relationship, trickle-down leadership theories would suggest that the leader will develop similar positive relationships with their subordinates.

Prior research has consistently documented that high-quality LMX is related to several work attitudes and behaviors of employees (Gerstner & Day, 1997), including a positive link between LMX quality and job satisfaction (Golden & Veiga, 2005; Graen, Liden, & Hoel, 1982; Major, Kozlowski, & Chao, 1995; Schriesheim, Scandura, Eisenbach, & Neider, 1992; Stepina, Perrewe, Hassell, & Harris, 1991) and a negative relationship between LMX and members' intentions to leave the organization (Vecchio & Gobdel, 1984; Wilhelm, Herd, & Steiner, 1993).

Team members who share high-quality LMX might enjoy several benefits, such as greater discretion and visibility in performing their jobs, access to scarce resources, more interesting job assignments, and higher performance ratings (Dansereau, Graen, & Haga, 1975; Dienesch & Liden, 1986). These positive outcomes would therefore entice the team members to remain within the organization.

Hypothesis 5: LLX will be negatively related to team member turnover intentions.

Trickle-down theory suggests that if a leader reports to a level-up supervisor who is perceived as developing strong differentiated relationships among subordinates, the leader will in turn develop differentiated relationships with their own subordinates, forming high-quality relationships with some employees and low-quality exchanges with others. This likely has serious implications for the employees at the lowest level in an organizational hierarchy. If a leader emulates the actions of their own supervisor, the implications for the employee will be similar to the relationship posited as part of Hypothesis 2. That is, if a leader has high-quality LLX and is on a team with high LLX-D, the subordinate stands to gain from not only the leader's high LLX, but also from the differentiated LMX relationships the leader will emulate with their own subordinate team members, indicating to the subordinate that there is a possibility of eventually being a part of the leader's "in-group". However, if there is little LLX-D in the leader's team, the leader will in turn attempt to minimize differentiated LMX relationships within the team they supervise, indicating to the subordinate team members that increased effort or better work will not necessarily enhance the exchange relationship with the leader. With the theoretical implications of trickle-down leadership and LLX considered, it stands to reason that employees will recognize the quality of their leaders' LLX and the degree to which they differentiate in their relationships with their subordinates (resulting from the differentiation their own level-up supervisor exhibits), and this will affect the subordinates' decision to remain in the organization.

Hypothesis 6: LLX-D will moderate the relationship between LLX and member turnover intentions such that the relationship will be stronger in teams where LLX-D is higher than when LLX-D is lower.

3. METHODS

3.1 Research Setting

The participants in this study are state employees who worked for a single government agency. The agency (i.e., organization) is responsible for overseeing family welfare programs throughout the state. Employees shared an office (i.e., were geographically proximal to) and worked closely with their supervisors on a regular basis. At the time of the study, the organization employed 1,915 employees staffed among 97 separate offices across the state. All of these employees were potential participants. Out of the total number of potential participants, 1,623 were lower level employees, whom I hereafter refer to simply as "employees" while 291 were in management positions and whom I hereafter refer to as "supervisors." All employees had the same overall job title and had relatively similar job roles. The same was true for supervisors.

Prior to beginning the study, the potential participants received a letter from the Human Resource (HR) Director of the organization, including a message from one of the researchers responsible for collecting the data, requesting their participation in a study designed to understand their attitudes and experiences, both with their job and leadership within the organization with the overall goal of better understanding staff attitudes and experiences. Shortly thereafter, potential participants received an email containing information about the study and a link to an online survey. All potential participants were informed that their decision to participate or not participate in the study would be recorded, but that it would not be shared with any members of the organization. Participants were also informed that any and all of their responses would be kept confidential. Finally, all of the potential participants were informed that they would be entered into a drawing in which they would have an opportunity

to receive one of three $100 Visa® gift cards, which would be randomly awarded to participants who completed the online survey.

3.2 Participants

The researchers gathered responses from 1,477 employees − 1,235 of whom were employees and 242 were supervisors − yielding an overall response rate of 77.1% for the entire organization, 76.0% for employees alone and 83.2% for supervisors alone. However, because my research questions concern LMX-D, it was important to examine only those participants who met standards considered necessary before performing cross-level analyses related to LMX-D. As outlined by Erdogan and Bauer (2014), when studying LMX-D, it is important to ensure that you have either a) sampled the entire group or b) employed true random sampling when selecting participants. In this situation, I sampled employees from the entire organization. Additionally, it is strongly suggested that researchers confirm a group of employees contains three members before it is considered a "team" appropriate for analysis, each member of the team report to the same manager, and each team member report to only one manager. Finally, it is also recommended that 60% or more of all direct reports for one manager are included in the final sample. When the sample was adjusted to adhere to this criteria, I was left with a sample of 981 employees across 216 employee teams and 180 supervisors situated across 25 offices. After adjusting the leader teams to include teams with at least two members, I was left with 210 responding supervisors across 40 offices.

However, it is also important to consider that many of my hypothesized effects must be tested in situations in which employee respondents can be matched to their respective supervisor (and the teams of the supervisor) to whom they report. As such, in studies when cross-level effects are being tested, the subjects must all meet the aforementioned criteria for examining LMX-D, but employees must also be matched to their respective supervisors. For example, although I could examine the relation-

ship between LLX and turnover without taking into account any team-level phenomenon for the leaders employees, if I examine how team LMX mean may account for additional variance in the relationship between the LLX x LLX-D interaction and leader-level outcomes, I cannot use teams of employees who do not report directly to the leaders who have reported the LLX in question. With this considered, such cross-level analyses was conducted with a sample of 325 employees nested within 72 supervisors (or member teams) nested within 20 offices (or leader teams).

The final leader sample contained 72 individuals. This included 14 men (or 19.4%) and 58 women (or 80.6%). The majority of leaders were White (63, or 87.5%) while the rest were Black (8, or 11.1%) or reported being of two or more races (1, or 1.4%). One leader (or 1.4%) was between the ages of 18-25, 22 (or 30.6%) were between the ages of 26-35, 28 (or 38.9%) were between the ages of 36-45, 11 (or 15.3%) were between the ages of 46-55, and 10 (or 13.9%) were 56 or older. The final member sample contained 325 individuals. This included 61 men (or 18.8%) and 264 women (or 81.2%). The majority of members were White (257, or 79.1%) while the rest were Black (50, or 15.4%), Hispanic (9, or 2.8%), Asian (3, or .9%), or reported being of two or more races (5, or 1.5%). 44 (or 13.5%) were between the ages of 18-25, 156 (or 48.0%) were between the ages of 26-35, 55 (or 16.9%) were between the ages of 36-45, 56 (or 17.2%) were between the ages of 46-55, and 14 (or 4.3%) were over the age of 56.

3.3 Measures

3.3.1 LMX/LLX

As is standard in LMX research, LMX was measured from the perspective of the lower-level member in the leader-member dyad to describe his or her exchange quality with the leader (e.g., Chen et al., 2007; Erdogan & Enders, 2007; Tangirala et al., 2007). I measured the member's upward ties to his or her boss (i.e., LMX) using an eight-item adaptation of the LMX-7 measure (Scandura & Graen, 1984)

– with changes to the wording suggested by Liden, Wayne, and Stillwell (1993) and Bauer and Green (1996). More specifically, one of the LMX-7 original items ("Do you usually feel that you know where you stand . . . Do you usually know how satisfied your immediate supervisor is with what you do?") was split into two separate items ("I usually know where I stand with my[superior's title]" and "I usually know how satisfied my [superior's title] is with me"). Additionally, along with changes to the wording of the original LMX-7 items, the scale was altered from its original 5-point frequency scale to a uniform 7-point agreement scale ranging from strongly disagree (1) to strongly agree (7). This adapted scale has been successfully used by other researchers (e.g., Chen, Kirkman, Kanfer, Allen, & Rosen, 2007; Tangirala et al., 2007). I measured the leader's LMX quality with their level-up leader (i.e., LLX) using the same eight-item adaptation of the LMX-7 scale. This measure captures the three important facets of the quality of a dyadic relationship: trust, respect, and obligation (Graen & Uhl-Bien, 1995). Sample items from this measure are "I would view my working relationship with my [superior's title] as extremely effective" and "I can count on my [superior's title] to 'bail me out,' even at his/her own expense, when I really need it." I adjusted the superior's title in the items depending on whether the survey was completed by a member or a leader. Coefficient alpha for the leader LLX scale was .94.

3.3.2 LMX-D/LLX-D

It is typical for researchers examining LMX-D to measure LMX at the individual level, and then aggregate these individual results to the group level using metrics such as standard deviation or variance. Inherent in this method is an assumption that the LMX qualities between the sample of employees drawn from the team represent the actual variation of LMX quality within the team. However, the conclusions drawn from a study will have limited generalizability and validity if only a small percentage of employees are sampled, percentage of respondents is low, or there is response bias. As

an example, if members with low LMX quality choose not to respond to a study, the LMX-D of the sample will not represent the actual differentiation that exists within the team, potentially underestimating the effects of differentiation. As a result, the best procedural option is to make every effort to reach all members of the intact work group reporting to the same supervisor, ensuring a large response rate. If this is not feasible, another alternative is to attempt to gather a true random sampling of team members (Erdogan & Bauer, 2014). Past researchers customarily used a 60% cutoff for an acceptable response rate (e.g., Liden et al., 2006; Ma & Qu, 2010).

For the purposes of this thesis, only lower-level and supervisor teams with at least a 60% response rate were included in the analyses. In order to operationalize LMX-D for each team, I used within-team standard deviation (cf. Ford & Seers, 2006; Liden et al., 2006; Nishii & Mayer, 2009; Roberson, Sturman, & Simons, 2007; Schyns, 2006). Higher within-team standard deviation represents the variability in team members' perceptions of LMX quality, resulting in higher differentiation. According to the simulation study by Roberson et al. (2007), the within-team standard deviation is a particularly effective operationalization of LMX-D when attempting to recognize interaction effects similar to those investigated in this thesis. At the lowest employee level (individual member-level), LMX-D was operationalized as the team-level SD of scores on the LMX-8 measure. At the leader level, LLX-D was assessed by calculating the within-office standard deviation of supervisor LLX scores.

3.3.3 Turnover Intentions

Intentions to turnover were measured using the Turnover Intentions Measure developed by Kelloway, Gottlieb, & Barham (1999). The measure consists of 4 questions with responses on a 5-point Likert-type scale ranging from strongly disagree (1) to strongly agree (5). Examples of items include "I am planning to look for a new job" and "I don't plan to be at this job much longer." Coefficient alpha was .93 for leaders and .96 for members.

3.3.4 Leadership Self-Efficacy

Leaders rated their leadership self-efficacy using an 11-item scale developed by Ng, Ang, and Chan (2008). This scale was adapted from Chemers et al. (2000) and consisted of items that asked participants for their beliefs about their ability in specific areas of leadership, which covered task, conceptual, and interpersonal skills. Items were measured on a 5-point Likert scale ranging from not at all confident (1) to extremely confident (5). Examples of the aspects of leadership on which leaders rated their confidence include "planning ability," "setting direction," and "ability to motivate others." Coefficient alpha was .91.

3.3.5 Emotional Exhaustion

Emotional exhaustion was assessed with eight items from the emotional exhaustion subscale of the Oldenburg Burnout Inventory (OBI; Demerouti, Bakker, Kantas, & Vardakou, 2002). The OLBI consists of 16 items, half of which measure the exhaustion dimension of burnout and the other half measuring disengagement. The emotional exhaustion subscale included four positively worded items and four negatively worded items. Participants were asked to respond to the items by using a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). Sample items include "There are days when I feel tired before I arrive at work," and "After my work, I usually feel worn out and weary." Coefficient alpha was .86.

3.3.6 LMX Mean

LMX mean is a group-level construct which was determined by calculating the mean of the reported LMX relationships for each team member reporting to a single supervisor.

3.4 Control Variables

In order to rule out alternative explanations for my findings and assess the degree to which LLX, LLX-D, and the LLX/LLX-D interaction account for variance in our outcome measures beyond the variance accounted for by other potential explanatory variables, I included several control variables in the analyses.

3.4.1 LLX Mean

Previous studies have shown LMX mean and LMX differentiation to be strongly and negatively correlated (e.g., Kinicki & Vecchio, 1994; McClane, 1991; Nishii & Mayer, 2009), and have offered suggestions to remedy this issue (e.g., Cole, Bedeian, Hirschfeld, & Vogel, 2011; Erdogan & Bauer, 2014). According to Erdogan and Bauer (2014), "In order to ascertain whether it is the variation or level of LMX within the team that makes the difference, it seems important to include LMX mean and differentiation simultaneously into models." Therefore, in an attempt to analyze a model which included LLX-D, I included leader team LLX mean as a control variable. Additionally, because group-level LMX mean has been found to be an important predictor of group effectiveness in previous studies (Boies & Howell, 2006; Liden et al.; Le Blanc & Gonzlez-Rom, 2012), I included leader group-level LLX mean as a control variable in this study. This is consistent with previous recommendations that have been provided for how to run statistical analyses when testing models with standard deviation as a measure of disparity (Harrison & Klein, 2007).

3.4.2 Age

I included the age of team members because it may be associated with their experience in working within team-based work structures and, therefore, related to the relationship they have with their supervisor.

3.4.3 Level of Education

The average educational level of team members was included as a control because it may be associated with their understanding of and ability to effectively apply strategies for team functioning and coordination.

3.4.4 Job Tenure

The average tenure of the team members was included as a control because the amount of time team members have spent interacting with their supervisor and one another may be related to teamwork and team effectiveness (Liden et al., 2006).

3.4.5 Job Performance

I captured performance evaluations using data that was independently provided by HR. Specifically, the data was comprised of actual performance appraisals that were conducted annually by the organization and at the end of the calendar year. In this case, job performance was assessed approximately six months after the close of the survey. Employees were held responsible for demonstrating competency in several areas: job knowledge; teamwork; customer service; interpersonal relations; judgment and assessment; and problem-solving, decision-making, and plan development. However, overall job performance was rated via a single item in which supervisors indicated to what extent the employees' overall job performance ranged from 'does not meet expectations' (1) to 'outstanding' (5).

3.5 Analyses

3.5.1 Moderated Regression

Employees in this study are nested within supervisors, as multiple subordinates reported to a given supervisor, thus resulting in a supervisor "effect" for certain vari-

ables (e.g., LMX relationship quality). To account for these inherent supervisor-level effects, I used a linear mixed-modeling approach in conjunction with the procedures outlined as part of hierarchical linear regression (Aiken & West, 1991) when appropriate. This approach essentially partials out variance in subordinates' responses due to the supervisor to whom they report, allowing me to examine only the individual-level variance unexplained by the manager effect. Using mixed models analysis to test cross-level interactions is superior to using ordinary least square (OLS) regression because including individuals from the same group violates regression assumptions and underestimates standard errors of group-level variables, leading to the overestimation of relationships. Additionally, I centered predictor variables around the grand means to allow for meaningful interpretation of the regression coefficients and the mitigation of issues related to collinearity (Aiken & West, 1991; Cohen, Cohen, West, & Aiken, 2003). When testing multilevel models, centered predictor variables tend to be more stable, and estimates from these models can be treated as more or less independent of each other (Field, 2009, pg 741).

In order to understand the nature of any moderated effects, I plotted the slopes of the interactions following the procedure illustrated by Cohen, Cohen, West, and Aiken (2003).

3.5.2 Moderated Mediation

To test for mediation and moderation, I followed the procedure outlined by Baron and Kenny (1986). According to Baron and Kenny (1986), four criteria must be met to support either full or partial mediation. First, the independent variables (i.e., LLX, LLX-D, and team LMX mean) need to be significantly related to the mediator (i.e., leadership self-efficacy and emotional exhaustion). Second, the independent variables need to be significantly related to leader turnover intentions. Third, either leadership self-efficacy or emotional exhaustion need to be significantly related to leader turnover intentions. Finally, the relationship between LLX and turnover intentions

must cease when the influence of the interaction and mediation effects are introduced into the mixed-modeling equation predicting turnover intentions. If after introducing the mediator, the coefficient between LLX, LLX-D, and team LMX mean and turnover intentions remains significant but is reduced, there is evidence for partial mediation.

4. RESULTS

Tables 1a, 1b, and 1c present the descriptive statistics and bivariate correlations of the study variables at each of the three levels examined. In Table 1a, the strongest correlation is between member age and job tenure, $r(323) = .56$, $p < .05$. There is a weak but significant correlation between member TOI and gender, $r(323) = -.15$, $p < .05$. However, aside from this correlation, there are no other control variables which correlate strongly with TOI. Therefore, in order to conserve statistical power, I made the decision to drop member performance and level of education as control variables from subsequent analyses. This decision is consistent with the recommendations of Becker, who suggested not to include "impotent control variables (i.e., ones uncorrelated with the dependent variable)" (2005: 285) as this inclusion reduces power. However, in accordance with recommendations by Breaugh (2006), I will preserve tenure, age and sex as previous research has shown the connection between employee age, organizational tenure, and gender as predictors of turnover intentions and actual turnover (Griffeth et al., 2000; Hom, Roberson, & Ellis, 2008).

In Table 1b there is a strong correlation between leader age and tenure, $r(70) = .69$, $p < .01$. Additionally, the only variable which appears to correlate strongly with TOI is leader LLX, $r(70) = -.49$, $p < .01$. Leadership self-efficacy is correlated significantly with leader gender, $r(70) = .30$, $p < .05$, and level of education, $r(70) = .27$, $p < .05$. There are also moderate significant correlations between leader emotional exhaustion and leader age, $r(70) = -.24$, $p < .05$, emotional exhaustion and LLX, $r(70) = -.37$, $p < .01$, and emotional exhaustion and TOI, $r(70) = .29$, $p < .05$. Leader performance and job tenure are the only variables that do not correlate moderately or significantly with any outcome variables. Therefore, in keeping with the justification for the removal of control variables mentioned previously, I will remove

performance as a control variable for subsequent analyses, but will retain tenure as a control due to its strong theoretical connection with my outcome variables of interest.

In Table 1c, there is a strong, negative correlation between LLX-D and leader team LLX mean, $r(18) = -.56$, $p < .01$. This correlation confirms the assertion made by several researchers that these construct are almost always related in this way and therefore, the mean variable must be controlled for when conducting analyses which include measures of differentiation (Erdogan & Bauer, 2014).

4.1 Moderation of the LLX and Leader Turnover Intention Relationship

In Hypothesis 1, I predicted that LLX would be negatively associated with leader TOI. As shown in Table 2, the results from testing Model 2 indicate the relationship between LLX and leader TOI is negative and significant, $\gamma = -.37$, $p < .05$, supporting Hypothesis 1.

To test the hypothesized moderating effects of LLX-D and team LMX mean on turnover intentions, I used multilevel mixed modeling. Employees in this study are nested within supervisors, and multiple subordinates report to a given supervisor, thus resulting in a supervisor "effect" for certain variables (e.g., LMX relationship quality). To account for these inherent supervisor-level effects, I used a mixed-modeling approach to conduct my analyses when appropriate. This approach essentially partials out variance in subordinates' responses due to the supervisor to whom they report, allowing me to examine only the individual-level variance unexplained by the supervisor effect. Using mixed models analysis to test cross-level interactions is superior to using ordinary least square (OLS) regression because including individuals from the same group violates regression assumptions and underestimates standard errors of group-level variables, leading to the overestimation of relations. I also centered predictor variables around the grand means to allow for meaningful interpretation of the regression coefficients and to mitigate issues related to collinearity (Aiken & West, 1991; Cohen, Cohen, West, & Aiken, 2003). When testing multilevel models,

centered predictor variables tend to be more stable, and estimates from these models can be treated as more or less independent of each other (Field, 2009, pg 741). Additionally, in order to understand the nature of the moderated effects, I plotted the slopes of the significant interactions following the procedure illustrated by Cohen, Cohen, West, and Aiken (2003).

In Hypothesis 2, I predicted that the relationship between LLX and leader turnover intentions would be moderated by LLX-D such that the relationship is stronger when LLX-D within teams is higher than when it is lower. The plot of this interaction is displayed in Figure 2. The coefficient for the cross-level interaction term between LLX and LLX-D was moderately positive, but not significant, $\gamma = 0.21$, *ns*, providing no support for Hypothesis 2.

In Hypothesis 3, I predicted that variance attributable to team LMX mean would further explain the two-way cross-level interaction between LLX and LLX-D, such that team LMX mean would weaken the negative effect of LLX on leader TOI in leader teams with high LLX-D. The coefficient for the relationship between the cross-level 3-way interaction term comprised of LLX, LLX-D, and team LMX mean and leader TOI was both positive and significant, $\gamma = 1.62$, $p < .01$, providing initial support for Hypothesis 3.

In order to better assess the strength and nature of the relationship between the 3-way interaction and leader turnover, I plotted the interaction. This plot is displayed in Figure 3. I hypothesized that team LMX mean would weaken the negative effect of LLX on leader TOI in leader teams with high LLX-D. A visual inspection of the upper plot indicates that, when looking at leader teams in which LLX-D is high, there is a negative relationship between LLX and TOI regardless of whether or not team LMX mean is high or low. Comparing this plot with Figure 2, it appears that team LMX mean does matter, such that low team LMX mean weakens the negative relationship between LLX and TOI. Conversely, the lower plot of Figure 3 suggests that when LLX-D is low, high team LMX mean exacerbates the negative effect of LLX on TOI.

A simple slopes test showed that there is a marginally significant difference between the two slopes, $t = 1.86$, $p < .10$.

The lower plot of Figure 3 offers further insight into the effect of team LMX mean further moderating the relationship between LLX and TOI for leaders in teams with low LLX-D. Compared to the moderated relationship presented in Figure 2, the plot examining the further moderating effect of team LMX mean suggests that low team LMX mean may not only make the negative LLX-TOI relationship stronger, but may also make the relationship slightly positive. That is, across leaders with low LMX relationships with their subordinates, if the leader is on a team with high LLX-D, the LLX-TOI relationship is negative. However, if the leader is on a team with low LLX-D, the negative LLX-TOI relationship presented in Figure 2 becomes positive. Furthermore, a simple slopes test showed a marginally significant difference between the two slopes, t = -1.78, $p < .10$. These results suggest that the amount of LLX-D matters, and that the effects are fully understood when taking into account the support that leader's have from their team of subordinates. These results collectively offer support for Hypothesis 3.

4.2 Tests of Moderated Mediation

Tables 3 and 4 present the results for Hypothesis 4a and Tables 5 and 6 present the results for Hypothesis 4b. In Hypothesis 4a and 4b, I predicted that the three-way interaction of LLX, LLX-D, and team LMX mean on leader turnover intentions would be partially mediated by the leader's leadership self-efficacy and the leader's emotional exhaustion, respectively. In order to test these mediated relationships, I used the approach outlined by Baron and Kenny (1986), followed by the examination of conditional indirect effects using techniques outlined by Preacher, Rucker, and Hayes (2007). Additionally, as with the previous analyses, these analyses were conducted using multilevel mixed modeling to account for the multilevel nature of the data. According to Baron and Kenny (1986), four conditions are necessary to

establish mediation: (1) the independent and mediating variables must be significantly related; (2) the independent and dependent variables must be significantly related; (3) the mediator and dependent variable must be significantly related; and (4) the relationship between the independent variable and dependent variable should be nonsignificant or weaker when the mediator is added.

Following the order of the aforementioned conditions, the test for Condition 1 for Hypotheses 4a is presented in Table 3. These results indicate that there is no significant relationship between LLX and leadership self-efficacy. Furthermore, among the main effects and interactive effects, the only significant relationship is between the LLX and team LMX interaction and leadership self-efficacy. As Condition 1 is not met, there is no support for Hypothesis 4a.

Although there was no support for this moderated mediation based on the Baron and Kenny (1986) approach, I wanted to test for the conditional indirect effects as outlined by Preacher et al. (2007). Using the formulas provided by the authors, I estimated the strength of the indirect effects by estimating simple slopes coefficients at 1 SD above and 1 SD below the mean of LLX-D and team LMX mean (point estimates) and confidence intervals generated through resampling, using information from my mixed modeling results. Results of these tests for Hypothesis 4a are presented in Table 4. These point estimates and resampling results revealed that at low, mean, and high levels of both LLX-D and team LMX mean, the 90% bias bootstrap corrected confidence intervals included 0, providing nonsignificant results.

Table 5 presents the mixed modeling results of Baron and Kenny's (1986) prescribed conditions for determining mediation. According to these results, there is no significant relationship between LLX and emotional exhaustion. Furthermore, there is no significant relationship between any of the main effects and interactions on emotional exhaustion. As Condition 1 is not met, there is no support for the hypothesized moderated mediation. Although not all of the conditions of mediation are met, I wanted to test for any significant conditional indirect effects at different level of the moderators, LLX-D and team LMX mean. These results are found in

Table 6. As with the results of the conditional indirect effects in Hypothesis 4a, these analyses also revealed that there are no significant indirect effects at any levels of the moderators, providing no support for Hypothesis 4b.

4.3 Moderation of the LLX and Member Turnover Intention Relationship

In Hypothesis 5, I predicted that LLX would be negatively associated with team member TOI. As shown in Table 5, the results from testing Model 2 indicate no significant relationship between LLX and team member TOI, γ = -0.03, *ns*, providing no support for Hypothesis 5.

In Hypothesis 6, I predicted that LLX-D would moderate the relationship between LLX and team member TOI such that the relationship will be stronger when the LLX-D within teams is higher than when it is lower. The results from testing Model 4 indicate that although there are no significant main effects for LLX, γ = -0.10, *ns*, and LLX-D, γ = -0.12, *ns*, there is a marginally significant LLX and LLX-D interaction effect, $\gamma = 0.34$, $p < .10$, providing initial support for Hypothesis 6.

To better assess the strength and nature of the relationship between the LLX and LLX-D interaction and team member TOI, I plotted the interaction. This plot is displayed in Figure 4. This plot suggests that when LLX-D is low, there is a negative relationship between LLX and team member TOI. In fact, team member TOI is highest when LLX is low, but lowest when LLX is high. Furthermore, the plot suggests that when LLX-D is high, LLX does not have a relationship with turnover intentions. Together, these results suggest that LLX matters, but only when LLX-D is low. I hypothesized that the negative effect of LLX on team member TOI would be stronger when LLX-D is high, but these results suggest a stronger negative relationship when LLX-D is low and almost no relationship when LLX-D is high, indicating no support for Hypothesis 6.

5. DISCUSSION

In this thesis, I advance theory on LMX and LMX-D by outlining the way these workplace phenomena relate to leader and employee attitudes towards leaving the organization. My findings contribute to LMX theory by examining the way in which leader's LMX (presented in this thesis as LLX) and LLX-D interact to not only determine turnover intentions for the leader but also for the members of that leader's team. Furthermore, my findings demonstrate the strong influence that the leader's relationship with the members of their team has on the leader's intent to turnover. I found evidence of significant interaction effects which provide interesting and insightful results.

I found evidence of a significant relationship between LLX and leader intent to turnover, but did not find evidence that LLX-D moderates the relationship. However, when plotting this interaction, I found that the position and direction of the negative LLX-TOI relationship in both high and low LLX-D leader teams is similar to what I hypothesized, however the lines themselves are switched. That is, when examining the effect of LLX-D on leaders with low LLX, leaders on teams with low LLX-D (where all employees are treated more equally than not) have higher TOI. However, when LLX-D is higher, these low LLX leaders exhibit lower TOI. It appears that when leaders have high LLX, LLX-D has little effect on TOI. In summary, there is a negative relationship between LLX and TOI, but the relationship is stronger when leaders are treated equally in terms of LLX.

Taking this relationship a step further, I examined whether team LMX mean would potentially offset these negative relationships. As hypothesized, I found evidence of a significant interactive effect of LLX, LLX-D and team LMX mean on leader TOI. After plotting this relationship, I found that when LLX-D is high, the negative relationship between LLX and TOI becomes weaker as team LMX mean

increases. Conversely, when LLX-D is high, the negative LLX-TOI relationship becomes stronger as team LMX mean decreases. These results indicate that team LMX mean matters in determining leader TOI when the leader is on a team with high LLX-D. More specifically, what this suggests is that if a leader has higher-quality relationships with their subordinate team members, these team members act as a support system for the leader. The leader may be spending a large portion of their time developing and maintaining these relationships, potentially becoming more embedded in the organization and feeling less intent to turnover. However, if a leader does not have a positive relationship with their subordinate team members, the negative LLX-TOI relationship is stronger. This seems intuitive as leaders with low quality LLX relationship on a high LLX-D team will already be likely to intend to turnover, and the low quality subordinate team relationships only make the intent to turnover stronger. Leaders in this particular situation may not be interested in their role or the company in which they work. Rather than devoting their time and resources to developing relationships with their own teams or supervisors, they may consider their role to be more transaction-based rather than relationship-based. They may also be spending their time preparing to depart from the organization or suffering from what may be analogous to "senioritis" in a workplace context. Regardless, it is clear that for leaders in high LLX-D teams, the relationships they have with their team members matters in determining their intent to remain with, or leave, the organization.

It is interesting to note the effect that accounting for team LMX mean has on the LLX-TOI relationship for leaders who are on teams with low LLX-D. By taking the team LMX mean into account as an additional potential moderator, I found that the negative LLX-TOI relationship became stronger as team LMX mean increased, and conversely, the LLX-TOI relationship actually changed from negative to positive as the team LMX mean decreased. That is, the relationship between LLX and TOI is positive for leaders in low LLX-D teams who also have a low LMX relationship with their employees. These relationships are counterintuitive to what I anticipated,

specifically for leaders with low team LMX mean. I expected that these leaders would be less likely to intend to turnover as their own LLX relationships increased, but this is not the case. It may be that leaders with high-quality LLX recognize that their leader peers share the same high quality LLX relationships with their mutual supervisor, and rather than make social comparisons based on LLX relationships, they make comparisons based on the team LMX relationships their leader peers share with their subordinate teams. This type of comparison would indicate to a leader that their subordinate team LMX relationships are substandard relative to their leader-peer's team LMX relationships, which may in turn lead to a higher turnover intentions. On the other hand, when a leader has a low quality LLX relationship and recognizes that their leader peers share the same relationship with the supervisor, this would indicate to the leader that this is normal, appropriate leader behavior for the organization. This model behavior would then trickle down and influence the way in which the leader develops relationships with their own team, resulting in the leader developing the same low-quality LLX relationships with their team that they share with their own boss. If the leader feels that they are acting in accordance with organizational leadership norms, they are then less likely to intend to turnover.

Additionally, is it interesting that the negative LLX-TOI relationship is so much stronger when accounting for team LMX mean in these low LLX-D teams. These results indicate that leaders with the highest TOI are those who are in leader teams in which everyone shares a low quality LLX relationship but have a high LMX relationship with their team of subordinates. In these situations, the leader may recognize that their leadership ability is strong, but is not being appropriately recognized by their own leader or the organization. If a leader is in a situation in which their own leadership ability is salient based on their LMX relationships with their subordinates, but they are not in a place where they can be recognized or given better opportunities for themselves or their employees, it would be entirely reasonable for a leader to seek employment where their leadership ability is rewarded and they are empowered to develop better connections with the organization through their LLX relationships (in

accordance to the "linking pin" analogy). This strong negative relationship may also be a reflection of my earlier assertion that organizational culture or leader behavior "trickle-down" effects may influence a leader's decision to turnover. Specifically, if a leader recognizes that their own leadership philosophy is misaligned with the leadership philosophy of their own leader or the organization, they will be more likely to intend to turnover. As an example, if I am a leader with a strong belief in the importance of developing high-quality relationships with my subordinates, but my own leader subscribes to a style in which he or she develops exclusively transaction-based relationships with their employees, this would indicate a misalignment in leadership goals and values, resulting in my intent to leave the organization.

These combined results indicate that both LLX-D and team LMX mean matter in determining whether a leader chooses to leave an organization. In fact, the amount of LLX-D on a leader's team may have a drastic impact on leader TOI, but these effects are only fully understood when we take into account the LMX relationships that the leader has with their subordinates.

I also found interacting effects between LLX and LLX-D on the turnover intentions of leader's subordinates. After finding no significant relationship between LLX and team member TOI, I tested for the possible moderating effect of LLX-D on this relationship and found a significant interaction. It appears that there is almost no relationship between LLX and TOI when LLX-D is high, but there is a slight negative relationship between LLX and TOI when LLX-D is low. Although this does not support my hypothesized relationship, it does provide insight into the outcomes for team members as a result of the relationship that their leader has with their own level-up leader (relative to the relationships of the mid-level leader's peers). Specifically, the team member has higher TOI if he or she recognizes that their leader's level-up leader has a consistently low-quality relationship with all members of the team they oversee. However, the team member is less intent to turnover when their leader's level-up leader has a high-quality relationship with the team member's leader and all other leaders they oversee. On the other hand, if the leader's level-up leader

differentiates strongly between his or her LLX relationships, it appears that team member TOI remains the same regardless of whether or not their leader has a high or low LLX. It is possible that there is an additional boundary condition determining this relationship.

A final interesting point of discussion from my results is the similarity between leader and member TOI when looking at the LLX-TOI relationship moderated by LLX-D. As seen in Figure 2 and Figure 4, when the LLX-TOI relationship is moderated by LLX-D, the relationship is negative regardless of the level of LLX-D. However, in both cases, the negative relationship is stronger when LLX-D is low. Therefore, not only does LLX-D matter when examining the relationship between LLX and TOI outcomes for leaders and members, but the effect that it has is similar at both of these levels in the organization hierarchy.

5.1 Theoretical Implications

This thesis offers interesting theoretical implications related to the effects of differentiated LMX and LLX relationships on both leaders and employees who report to those leaders. Additionally, this study offers theoretical implications concerning the role that relationships between a leader and the team members they oversee may have in offsetting (or even reversing) strong negative or positive effects on leaders that occur as the result of the leader-leader dyadic relationship.

The results of this study extend extant research examining the possible moderating effect of LMX and/or LLX differentiation. Although I did find some significant effects when examining these constructs as moderators of the LLX and leader/member TOI relationships, the nature of the relationships is not as I had hypothesized. Specifically, while I hypothesized that high LLX-D would strengthen the negative relationships between LLX and turnover intentions for leaders and members, what I found was the opposite. It appeared that the stronger effects were associated with lower levels of LLX-D. This is contradictory to the proposition of Henderson et al. (2009)

which suggests that "Individual-within-group [LLX] quality is more strongly related to subordinate-level outcomes as group-level [LLX] differentiation increases. (p. 526)" Therefore, these findings would suggest that for TOI and other constructs of job-related attitudes, strong relationships will actually occur when LMX differentiation is lower than higher.

These results also suggest the importance of the group-level LMX relationships that a leader has with their team of subordinates. Scant research has examined the mechanisms by which these group-level differentiation constructs interact with LMX group-level constructs at unique hierarchical levels in an organization. This thesis not only suggests that the relationship between LLX and leader TOI is contingent upon the level of differentiated LLX relationships with the team, but that even those relationships are also moderated further by the relationships that a leader has with the team they supervise. As seen in Figure 2, this is particularly salient when a leader team has low LLX-D but the leader has a high-quality LMX relationship with his or her subordinates. Although the LLX and TOI relationship is negative regardless of whether or not LLX-D is high or low, further breaking this down as moderated by team LMX mean changes the negative relationship drastically for leader teams with low LLX-D such that the LLX and TOI relationship becomes much more negative when team LMX mean is high, and actually becomes slightly positive when team LMX mean is low. These findings elucidate the importance that team LMX mean play in determining individual outcomes when examining differentiated leader-member relationships.

Finally, this thesis extends multilevel theory related to the relationships between phenomena occurring at different level of the organization. In doing so, I also extended on previous work related to the Pelz effect, LLX, LMX Differentiation, and trickle-down leadership theory. Specifically, this thesis supports the idea of leader-level phenomena trickling-down to the member-level, or more generally upper-level effects trickling down to lower-levels in the organization. My results supported the assertion that the relationships that leaders have with their supervisors, along with

the differentiation of the relationships on the leader team, trickle down to the employees that make up the mid-level leader's team. By demonstrating a link between LLX, LLX-D, and outcomes for members of the leader-teams, I alert multilevel researchers to the outcomes of leader relationship differentiation on lower-level employees.

5.2 Practical Implications

This study has important practical implications regarding the management and leadership of employees. In most cases, it is likely advantageous for an organization to keep its seasoned, well-trained leaders, and as such, it is important to consider what may influence the desire for a leader to turnover.

High-level leaders who are responsible for the supervision of other leader's should take note of the important outcomes associated with the perceived differentiation in their relationships with the members of the teams they supervise. Although it may be impossible to treat all team members equally, leader TOI is lowest when the leader team supervisor has high-quality LLX relationships with nearly all members of the team. However, even in these situations, the relationships that the leader has with their own team of subordinates also influence their desire to stay or leave. In fact, even if a leader is a part of a leader team where all members have an equally high LLX relationship, an overall low-quality LMX relationship with the team the leader supervises increases the leader's intention to turnover. One potential explanation for this is a feeling of deficiency resulting from a leader's belief that, despite having a great relationship with their own boss, they do not have what it takes to develop high-quality relationships with their own subordinates. Another potential explanation is that these leaders may be spending more time developing their LLX relationships rather than working to develop these LMX relationships with their own subordinates. Regardless of what may be happening, it is important for leaders to be aware of the importance of employee perceptions of fairness regarding LMX relationships and use that awareness to manage employee relationships accordingly.

This attention towards developing workplace relationships at the leader-level also has implications for outcomes at the lower team-member level. The leader's relationships matter to the lower-level team members. So much so that team members have higher TOI if their leader's boss has equally low LLX relationships with all their team members. Lower-level team members recognize this fault in their "linking pin" to the rest of the organization, and it is likely that this perceived fault leads to higher TOI. On the other hand, team member's intent to turnover is lowest if their leader's boss has equally positive relationships with all of his or her team members. This would suggest that if an organization is concerned with lowering employee turnover, it may be beneficial for the leader teams to develop all-around high-quality LLX relationships. Consistent with previous LMX research, high-quality LLX relationships are more beneficial to lower-level employees than not. Furthermore, according to this study, lower-level employees will be less likely to intend to turnover if the level-up leader develops equally high-quality relationships between the leader team members they supervise. Although the development of high-quality, undifferentiated exchange relationships may not be practical for the leadership in some organizations, my thesis suggests this as a worthwhile goal.

5.3 Limitations and Future Directions

There were several noteworthy limitations to this thesis, which point to potential future research. First, there was little variance in leader turnover. Although actual turnover data was available, there were almost no leaders from the sample who had left their jobs during the period of data collection. Because of this, the use of actual turnover behavior as an outcome of interest needed to be replaced with a variable that was strongly related to actual turnover and also showed adequate variance – turnover intentions.

Second, many cases needed to be dropped before the data could be analyzed. Although data was collected from a relatively large number of individuals, in order for

the cases to be appropriate for testing my hypotheses they needed to meet certain criteria that are theoretically necessary for testing LMX and LMX-D models. Specifically, teams needed to consist of at least 3 individuals, and each team needed to have a response rate of at least 60%. Furthermore, for running cross-level models, leaders needed to be paired with members who met all the aforementioned criteria and vice-versa. Meeting all of these requirements yielded more dependable results, but did so at the cost of significantly lowering the sample size. Out of an original sample size of nearly 300 leaders and 2000 members, meeting the necessary conditions dropped the sample to 72 leaders and around 350 members. Researchers interested in testing similar multilevel, cross-level effects would benefit from the increased statistical power of a larger sample.

Third, although objective measures of workplace performance were available, I decided not to include performance as a control. Although it may be beneficial to control for past performance when examining turnover or intent to turnover, in this study a large portion of employees surveyed were missing this data. Although speculative, this may be due to some employees being hired after the performance data used in these analyses was collected, or the organization failing to gather performance data from the complete group of employees. Future researchers in this field may use an objective performance measure collected before the surveys to use as a control when examining turnover.

Finally, I was unable to test multilevel moderated mediation using SEM as suggested by statisticians specializing in multilevel modeling. In place of the MSEM procedure, I used a combination of the Baron and Kenny (1986) mediation approach in conjunction with the suggestions for discerning mediation at different levels of the moderators as outlined by Preacher et al. (2007). Although have been recent publications extolling the importance of using MSEM for analyses similar to those examined in this thesis (see Preacher, Zhang, and Zyphur, 2015), there have also been several recent publications which have used the Baron and Kenny mediation testing procedures to test models similar to those used in this thesis (see Avolio, Zhu,

Kho, & Bhatia, 2004; Kirkman, Chen, Farh, Chen, & Lowe, 2009). Future research examining relationships similar to those within this thesis would benefit from the use of more advanced, rigorous statistical procedures to test these relationships.

5.4 Conclusion

This thesis has yielded two especially interesting findings: First, I found evidence that leader relationships with their level-down teams act as a means of mitigating, and even changing, the relationship between LLX and leader turnover intentions, and second, I found that the level-up relationships that team leaders have with their own supervisors is related to the turnover intentions of the members of the teams they oversee. Many of these findings were not consistent with my specific predictions, but I believe these relationships are the result of the underlying theory discussed as part of my review of the literature. That is, through the underlying principles of LMX theory examined as a functional equivalent at the leader-level (LLX), leader outcomes that are commonly perceived as negative are mitigated through the relationships that the leaders share with their teams. Through social comparison processes, "trickle down" leadership theory, and the idea of leaders acting as the "linking pins" for lower-level employees, team member turnover attitudes are significantly related to the leaders relationship that they have with their level-up leaders. It would be beneficial for future LLX and LLX-D researchers to examine similar phenomena at multiple levels of the organizational hierarchy.

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TABLES

Table 1a
Descriptive Statistics and Correlations for Individual Member-Level (Level 1) Variables

	Variable	*M*	*SD*	1	2	3	4	5	6	7
1.	Member Age (years)	36.09	10.06							
2.	Member Sex[a]	1.82	.39	-.02						
3.	Member Performance[b]	3.02	.43	-.09	.10					
4.	Member Job Tenure (years)	1.43	.90	.56*	.05	-.01				
5.	Member Level of Education	3.12	.43	.11*	.04	-.06	-.03			
6.	Member TOI	2.41	1.07	-.03	-.15*	-.08	-.01	.04		
7.	Member POS	3.96	1.25	-.07	.07	.09	-.15*	-.01	-.56*	

Note: $n = 325$ except for Member Performance, for which $n = 247$. TOI = Turnover Intentions; POS = Perceived Organizational Support

[a] Coded as: Male = 1, Female = 2.

[b] Coded as: Does not meet expectations = 1, Needs improvement = 2, Meets expectations = 3, Exceeds expectations = 4, Outstanding = 5.

* $p < .05$. ** $p < .01$.

Table 1b

Descriptive Statistics and Correlations for Individual Leader-, Member Team-Level (Level 2) Variables

	Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10
Individual Leader Variables													
1.	Leader Age (years)	42.46	10.72										
2.	Leader Sex[a]	1.81	.40	-.05									
3.	Leader Performance[b]	3.18	.47	-.02	.04								
4.	Leader Job Tenure (years)	2.43	1.23	.69**	-.18	.04							
5.	Leader Level of Education	3.21	.41	.33**	.17	.16	.33**						
6.	Leader LLX	5.04	1.22	.01	-.03	.20	-.01	-.01					
7.	Leader TOI	2.13	.95	.06	-.23	-.05	.21	.13	-.49**				
8.	Leader LSE	3.96	.48	.17	.30*	.11	.01	.27*	.12	-.18			
9.	Leader EE	2.99	.71	-.24*	.05	-.04	-.14	-.14	-.37**	.29*	-.18		
Member Team Variable													
10.	Team LMX Mean	5.28	.82	.02	.06	.10	.07	.01	-.03	.02	.15	.08	

Note: $n = 72$. LLX = leader-leader exchange; TOI = turnover intentions; LSE = leadership self-efficacy; EE = emotional exhaustion; LMX = leader-member exchange.

[a] Coded as: Male = 1, Female = 2.

[b] Coded as: Does not meet expectations = 1, Needs improvement = 2, Meets expectations = 3, Exceeds expectations = 4, Outstanding = 5.

* $p < .05$. ** $p < .01$.

Table 1c

Descriptive Statistics and Correlations for Leader Team-Level (Level 3) Variables

	Variable	*M*	*SD*	1
1.	LLX-D	.99	.54	
2.	Leader Team LLX Mean	5.11	.68	-.56**

Note: $n = 20$. LLX = leader-leader exchange; LLX-D = leader-leader exchange differentiation.

* $p < .05$. ** $p < .01$.

Table 2
Linear Mixed Modeling Results Examining Leader Turnover Intentions (Hypothesis 1, 2, and 3)

Variable	Model							
	1	2	3	4	5	6	7	8
Intercept	2.10**	2.11**	2.11**	2.12**	2.16**	2.13**	2.14**	2.19**
Control Variables								
Age	-.03	-.05	-.06	.00	-.03	-.01	-.03	-.02
Tenure	.21	.22	.23	.19	.19	.19	.26	.18
Sex	-.26	-.39	-.26	-.39	-.39	-.43	-.47*	-.44
Leader Team LLX Mean			-.28	-.02	.03	-.03	.17	.07
Main Effects								
LLX		-.37**		-.40*	-.46**	-.41**	-.49**	-.53**
LLX-D				-.25	-.22	-.26	-.22	-.32
Member Team LMX Mean						.01	.12	.26*
Interaction Effects								
LLX * LLX-D					.21		.29	.15
LLX * Team LMX Mean							-.10	-.22
LLX-D * Team LMX Mean							-.34	-.36
LLX * LLX-D * Team LMX Mean								1.44**

Note. Leader level $n = 72$; leader team level $n = 20$. LLX = leader-leader exchange; TOI = turnover intentions; LSE = leadership self-efficacy; EE = emotional exhaustion; LMX = leader-member exchange. All variables grand mean centered. Models allow for random slopes and intercepts.
* $p < .05$. ** $p < .01$

Table 3
Linear Mixed Modeling Results for Testing Moderated Mediation (Hypothesis 4a)

		TOI			
Variable	LSE	Step 1	Step 2	Step 3	Step 4
Age		-.05	.00	-.02	-.01
Tenure		.22	.20	.18	.18
Sex		-.39	-.17	-.44	-.42
Leader Team LLX Mean	-.06			.07	.07
LLX	.12	-.37**		-.53**	-.53**
LLX-D	.14			-.32	-.32
Member Team LMX	-.04			.26*	.26*
LLX * LLX-D	-.03			.15	.14
LLX * Member Team LMX	.22**			-.22	-.20
LLX-D * Member Team LMX	.28			-.36	-.35
LLX * LLX-D * Member Team LMX	-.41			1.44**	1.42**
LSE			-.25		-.06

Note. Leader level $n = 72$; leader team level $n = 20$. LLX = leader-leader exchange; LLX-D = leader-leader exchange; LMX = leader-member exchange; LSE = leadership self-efficacy. All variables grand mean centered. Models allow for random slopes and intercepts.
* $p < .05$. ** $p < .01$

Table 4
Summary of Regression Results for Conditional Indirect Effects (Hypothesis 4a)

IV	Mediator	DV	Moderator 1: LLX-D	Moderator 2: LMX Mean	Indirect Effect	95% bias corrected bootstrap CI
LLX	LSE	TOI	High (+1 SD)	High	-.01	-.12, .04
			High	Mean	-.01	-.13, .06
			High	Low	-.01	-.23, .07
			Mean	High	-.03	-.23, .12
			Mean	Mean	-.01	-.14, .06
			Mean	Low	.00	-.04, .09
			Low (-1 SD)	High	-.05	-.43, .19
			Low	Mean	-.01	-.21, .06
			Low	Low	.02	-.06, .24

Note. Leader level $n = 72$; leader team level $n = 20$. LLX = leader-leader exchange; LLX-D = leader-leader exchange; LMX = leader-member exchange; LSE = leadership self-efficacy; TOI = turnover intentions.

Table 5
Linear Mixed Modeling Results for Testing Moderated Mediation (Hypothesis 4b)

		TOI			
Variable	EE	Step 1	Step 2	Step 3	Step 4
Age		-.05	.06	-.02	.04
Tenure		.22	.16	.18	.17
Sex		-.39	-.39	-.44	-.48*
Leader Team LLX Mean	-.40*			.07	.18
LLX	-.14	-.37**		-.53**	-.50**
LLX-D	-.32			-.32	-.24
Member Team LMX	.08			.26*	.25*
LLX * LLX-D	-.04			.15	.16
LLX * Member Team LMX	-.13			-.22	-.19
LLX-D * Member Team LMX	-.19			-.36	-.36
LLX * LLX-D * Member Team LMX	.21			1.44**	1.45**
EE			.45**		.26*

Note. Leader level $n = 72$; leader team level $n = 20$. LLX = leader-leader exchange; LLX-D = leader-leader exchange; LMX = leader-member exchange; EE = emotional exhaustion. All variables grand mean centered. Models allow for random slopes and intercepts.
* $p < .05$. ** $p < .01$

Table 6
Summary of Regression Results for Conditional Indirect Effects (Hypothesis 4b)

IV	Mediator	DV	Moderator 1: LLX-D	Moderator 2: Team LMX	Indirect Effect	95% bias corrected bootstrap CI
LLX	EE	TOI	High (+1 SD)	High	-.05	-.20, .02
			High	Mean	-.04	-.17, .01
			High	Low	-.04	-.31, .03
			Mean	High	-.06	-.27, .02
			Mean	Mean	-.04	-.18, .01
			Mean	Low	-.01	-.15, .05
			Low (-1 SD)	High	-.08	-.46, .05
			Low	Mean	-.03	-.23, .04
			Low	Low	.01	-.14, .23

Note. Leader level $n = 72$; leader team level $n = 20$. LLX = leader-leader exchange; LLX-D = leader-leader exchange; LMX = leader-member exchange; EE = emotional exhaustion; TOI = turnover intentions.

Table 7
Linear Mixed Modeling Results Examining Member Turnover Intentions (Hypothesis 5 and 6)

Variable	Model			
	1	2	3	4
Intercept	2.41***	2.41***	2.41***	2.47***
Control Variables				
Age	-.06	-.08	-.08	-.08
Tenure	-.09	.10	.10	.08
Sex	-.40***	-.42***	-.43***	-.44***
Leader Team LLX Mean			-.19	-.09
Main Effects				
LLX		-.03	-.00	-.10
LLX-D			-.13	-.12
Interaction Effects				
LLX * LLX-D				.34*

Note. Member level $n = 325$; leader level $n = 72$; leader team level $n = 20$. LLX = leader-leader exchange; TOI = turnover intentions; LSE = leadership self-efficacy; EE = emotional exhaustion; LMX = leader-member exchange. All variables grand mean centered. Models allow for random slopes and intercepts.

* $p < .10$. ** $p < .05$ *** $p < .01$

FIGURES

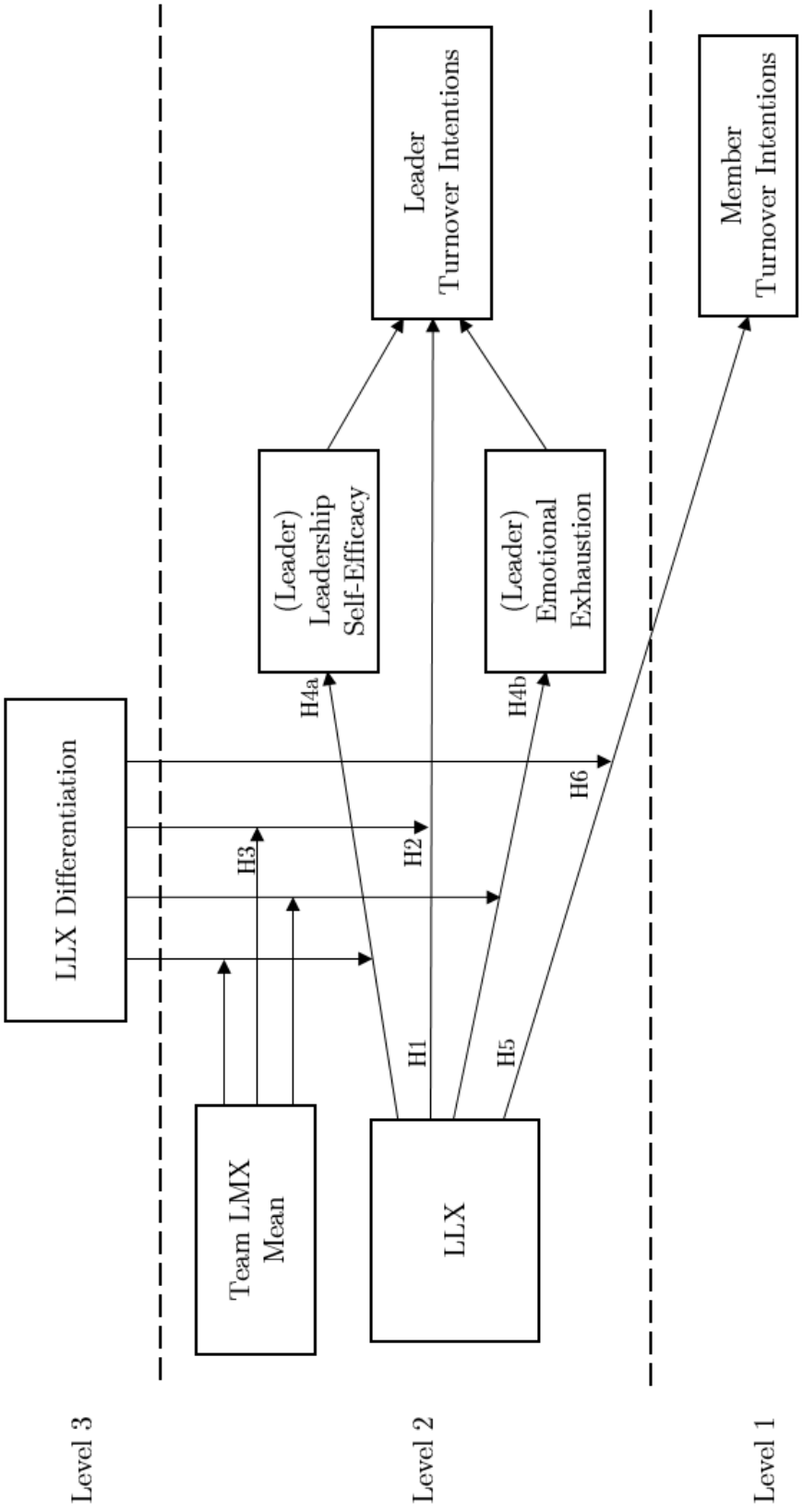

Figure 1 Full Hypothesized Model

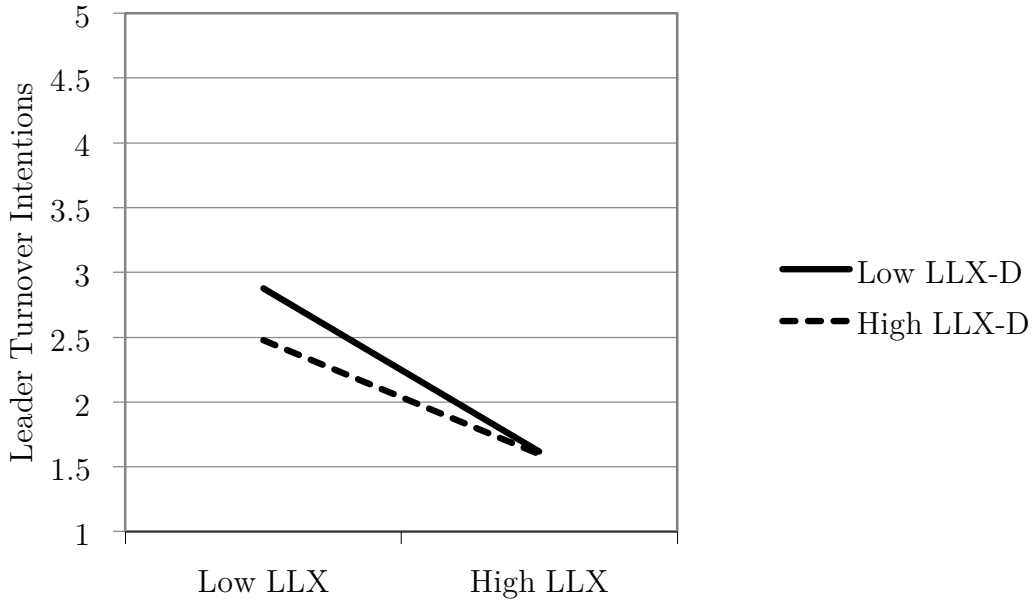

Figure 2 Two-Way Interaction Between LLX and LLX-D on Leader Turnover Intentions

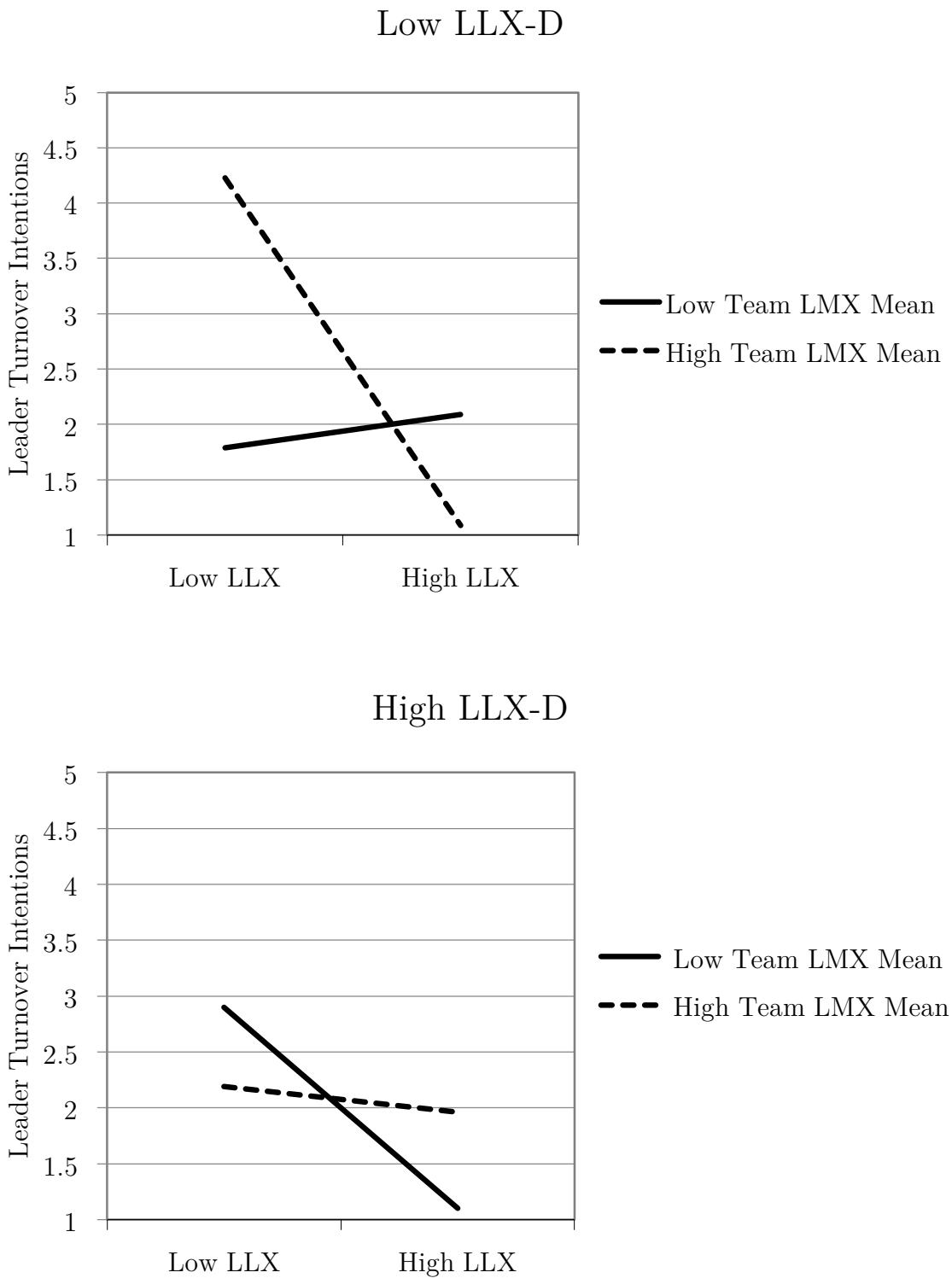

Figure 3 Exploratory Three-Way Interaction Among LLX, LLX-D, and Team LMX Mean on Leader Turnover Intentions

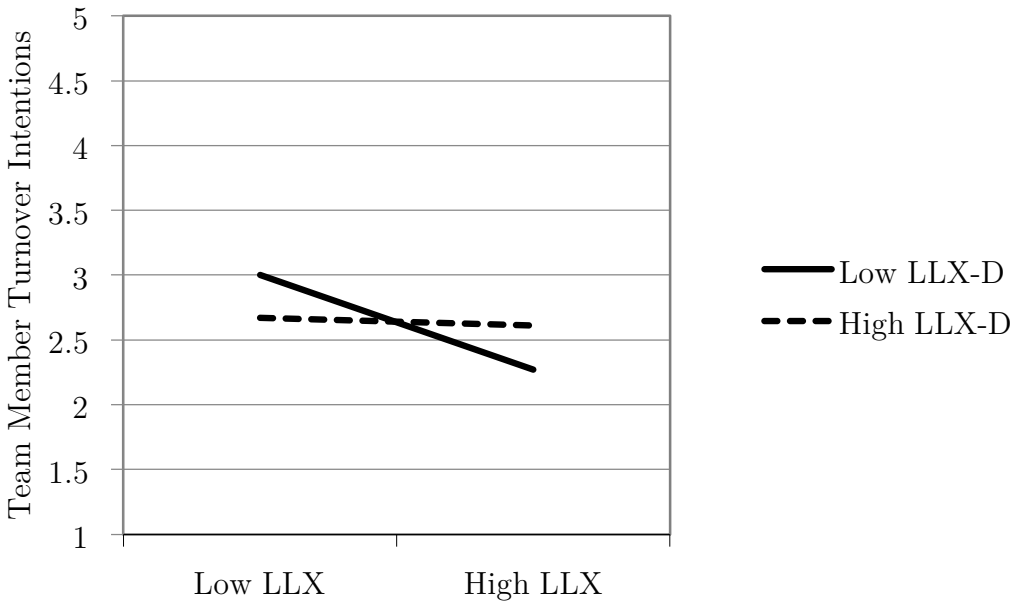

Figure 4 Two-Way Interaction Between LLX and LLX-D on Team Member Turnover Intentions