LMX differentiation and team performance

Linking Leader-Member Exchange Differentiation to Work Team Performance

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Brief professional biography

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Abstract

Purpose

This paper aims to propose a conceptual model that delineates the psychological process and boundary condition of how leader-member exchange (LMX) differentiation influences team performance.

Design/methodology/approach

Based on theories of leader-member exchange and social information processing, it is argued that several important mechanisms underpin the relationship between LMX differentiation and team performance. The role of these variables in the relationship is discussed.

Findings

The team mechanisms such as affective climate and team-member exchange (TMX) serve as a boundary condition and psychological process to influence the LMX differentiation-team performance relationship. Their conceptual significance and how they affect the relationship are discussed.

Research limitations

This study focuses on theorizing TMX and affective climate as key variables in the LMX differentiation-team performance relationship. Future research considers examining the relative importance of other variables such as team potency or team cohesion to advance our understanding of the precise mechanisms that explain the relationship.

Practical implications

The proposed model increases our understanding of the role of affective climate in the relationships between LMX differentiation, TMX and team performance. It helps minimize the negative effect of LMX differentiation, and may ultimately lead to better team performance.

Originality/value

Although the implication of LMX differentiation has been discussed extensively, the research has not yet led to a firm conclusion as to its relationship with team outcomes. This study is one of the first to theorize affective climate and TMX as an important psychological mechanism and boundary condition to simultaneously influence the LMX differentiation - team performance relationship.

(249 words)

Keywords: Leader-Member Exchange Differentiation, Team-member exchange and affective climate

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Introduction

With growing interest in emphasizing the use of work teams for organizational effectiveness, understanding the implication of different supervisor-subordinate relationships – leader-member exchanges (LMX) for team processes and outcomes – has become increasingly important because LMX relationships operate in a border social network that influences other exchange relationships within work teams (see Liden *et al.*, 2006; Tse *et al.*, 2008; Tse *et al.*, 2012). LMX differentiation refers to the degree of within-team variability in the quality of LMX relationships between a supervisor and members within a work team (Erdogan and Liden, 2002). Research has demonstrated that employees are aware of their relative standing in a set of differentiated LMX relationships in their work team (Henderson *et al.*, 2008; Tse *et al.*, 2012; Vidyarthi *et al.*, 2010). Thus, the degree of within-team LMX differentiation is present within the vast majority of work teams, and has been observed as playing a crucial role in shaping team processes and outcomes (Boies and Howell, 2006; Henderson *et al.*, 2009; Le Blanc and Gozalez-Roma, 2012). When a supervisor differentiates, the varied levels of LMX relationships operating within the work team are likely to influence the way members react toward their supervisor and to other members for achieving team effectiveness (Le Blanc and Gozalez-Roma, 2012; Liden *et al.*, 2006).

While House and Aditya (1997) note that the extant research has failed to specify the effect of LMX differentiation, the majority of LMX studies have tended only to look at the relationship between high-quality LMX relationships and employee work outcomes from an individual perspective (Gerstner and Day, 1997). Thus, research examining the surrounding

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social context of individual LMX within work teams has not been thoroughly investigated (Ma and Qu, 2010; Vidyarthi *et al.*, 2010). LMX differentiation has been regarded as an important avenue of research in the literature, and it has recently attracted more attention in relation to examining its implication on both individual and team outcomes (see Boies and Howell, 2006; Liao *et al.*, 2010; Stewart and Johnson, 2009).

For individual-level outcomes, Hooper and Martin (2008) reported that perceived LMX variability is negatively associated with job satisfaction and well-being, but it is positively related to team conflict. However, while Liden *et al.* (2006) did not find a relationship between LMX differentiation and individual performance, they found that it is significant in situations where team members experience a low-quality LMX relationship. Erdogan and Bauer (2010) also revealed that LMX differentiation is negatively associated to organizational commitment and satisfaction with coworker relationships, but is positively associated with helping behavior, targeting coworker and withdrawal behaviors when justice climate is low in work teams. With respect to team-level outcomes, LMX differentiation is not directly related to team performance (Le Blanc and Gozalez-Roma, 2012; Liden *et al.*, 2006), team potency, affective team commitment, and team conflict (Boies and Howell, 2006; Le Blanc and Gozalez-Roma, 2012), but the same relationships are significant only when boundary conditions such as task interdependence, team mean of LMX or team median of LMX are taken into consideration. Thus, research exploring the nature of the relationships between LMX differentiation and team outcomes is more complex than previously thought. Consequently, an integrated theoretical framework exploring both the underlying processes and boundary conditions of LMX differentiation is theoretically and practically important in order to provide a better

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understanding of its potential effect on team outcomes (e.g., Boies and Howell, 2006; Dotan *et al.*, 2004; Le Blanc and Gozalez-Roma, 2012; Liden *et al.*, 2006; Van Breukelen *et al.*, 2010).

The goal of this study is to propose a moderated-mediation model to account for the relationship between LMX differentiation and team performance. Specifically, we propose two mechanisms that are theoretically significant and relevant to our inquiry: 1) team-member exchange (TMX) (team members' perceptions of their relationships with other members in terms of the reciprocal contribution of ideas, feedback and assistance) (Seers, 1989; Seers *et al.*, 1995) is conceptualized as a psychological process mediating the LMX differentiation-team performance relationship, and 2) team affective climate (a shared positive perception among members or overall interaction patterns in work teams) (Choi *et al.*, 2003) is theorized as a boundary condition moderating the link between LMX differentiation and TMX.

Insert Figure 1 about here

Figure 1 depicts our propositions concerning the relationships in the proposed model, and highlights the contributions we attempt to make to the literature. First, we develop a moderated-mediation model that integrates the LMX and climate literatures to examine the psychological process of TMX and the boundary condition of team affective climate in the LMX differentiation-team performance relationship. Given the mixed support for the effect of LMX differentiation on team outcomes (see Boies and Howell, 2006; Van Breukelen *et al.*, 2010; Liden *et al.*, 2006), Le Blanc and Gozalez-Roma (2012) have called for more research to unveil the psychological processes and boundary conditions that account for the LMX differentiation-team performance relationship. This study is the first to theorize how TMX and team affective

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climate are played out in different roles to simultaneously influence the link between LMX differentiation and team performance.

Second, our research responds to a call by Liden *et al.* (2006) to identify potential intervening processes that explain the relationship between LMX differentiation and team outcomes. Recent investigations have focused on exploring the boundary conditions of LMX differentiation to account for why it has no relationship to team outcomes (see Boies and Howell, 2006; Le Blanc and Gozalez-Roma, 2012; Liden *et al.*, 2006). Drawing on social information processing theory (SIP) (Salancik and Pfeffer, 1978), we propose TMX as a key team-level psychological mechanism that can transmit the effect of LMX differentiation on team performance. Considering this, TMX may then help understand whether the degree of LMX differentiation will shape the way members perform in work teams, and as such, will broaden our perspective on the yet confirmed relationship between LMX differentiation and team performance.

Finally, this study extends Erdogan and Bauer's (2010) research by being the first to examine team affective climate as another climate-related boundary condition in relating LMX differentiation to TMX. This is important because existing research has demonstrated that the nature and direction of the relationships between LMX differentiation and team outcomes are largely dependent on the salience of boundary conditions (see Boies and Howell, 2006; Le Blanc and Gozalez-Roma, 2012; Liden *et al.*, 2006). Our model adds to more recent studies in this area by explaining why team affective climate characteristics influence team members' overall reactions to within-team LMX differentiation differently. Therefore, we explore this issue by delineating why and when LMX differentiation is effective in determining high-quality TMX relationships among members at the different levels of affective climate in work teams.

THEORETICAL BACKGROUND AND PROPOSITION DEVELOPMENT

LMX Differentiation: Conceptualization and Empirical Work

The concept of LMX differentiation has been rooted in the premise of LMX theory proposing that leaders form differential relationships with employees ranging from low-quality transactional relationships to high-quality socio-emotional relationships in work teams (Dansereau *et al.*, 1975). Early LMX research asserted that differentiation is necessary because leaders do not have sufficient resources, as well as enough time and effort to develop similar relationships with all team members (Graen and Uhl-Bien, 1995). LMX differentiation also occurs because team members have different personalities, needs and abilities that require leaders to adjust the quality of their relationships with team members accordingly (Maslyn and Uhl-Bien, 2001). Additionally, LMX differentiation allows leaders to undertake strategic responsibility in creating role differentiation, as well as facilitating differential contributions to team processes and effectiveness (Dienesch and Liden, 1986).

LMX differentiation reflects the degree of within-team variation when leaders form different LMX relationships with different members in work teams (Liden *et al.*, 2006). The variation in LMX differentiation is calculated by averaging the item variance in the LMX scale, and then aggregating the average item variance to create a LMX differentiation score for each work team (see Ford and Seers, 2006; Henderson *et al.*, 2008; Liden *et al.*, 2006). Hence, it is not essential to calculate a within-team agreement and a within-team mean reliability of LMX differentiation because it is composed from using a dispersion model (Chan, 1998). The use of a dispersion model is supported by the nature of LMX in instances where disagreements between members of a work team occur. Therefore, it would be difficult to expect that all team members will experience the same quality of LMX relationship with their supervisor, and the same levels

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of agreement would be unlikely to exist within all work teams (Ford and Seers, 2006). Thus, low-LMX differentiation suggests that all team members experience a similar but not the same level of LMX relationship with their supervisor, whereas a high level of LMX differentiation reflects a greater difference in the quality of LMX relationships the members form with their supervisor

One important question confronting LMX researchers is whether LMX differentiation is detrimental or beneficial to team processes and outcomes (Erdogan and Liden, 2002; Graen and Uhl-Bien, 1995; Liden *et al.*, 2006). The difficulty here however is how to understand what proportion of high-LMX and low-LMX members create benefits for or cause disruption to team effectiveness. Currently, the available evidence does not provide support for the argument that a large number of high-LMX members would be more motivated, cohesive and productive than a small number of high-LMX members in a work team (Erdogan and Liden, 2002; Liden *et al.*, 2006), and only a few studies have been conducted to examine whether the relationships between LMX differentiation, team processes and outcomes are largely contingent upon boundary conditions (Boies and Howell, 2006; Le Blanc and Gozalez-Roma, 2012; Liden *et al.*, 2006).

In particular, Liden *et al.* (2006) revealed that there is no main effect of LMX differentiation on team performance but the same effect is positively significant when work teams are high in task interdependence and low in team median of LMX. Le Blanc and Gozalez-Roma (2012) also showed that LMX differentiation has no relationships with team performance and affective team commitment, but the same relationships are positively significant when team median of LMX is low. In support of these findings further, Boies and Howell (2006) found that LMX differentiation is not related to team potency and team conflict, but the LMX differentiation-team potency relationship is positively significant when team mean of LMX is

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high, and the LMX differentiation-team conflict relationship is negatively significant when team mean of LMX is low. Likewise, Dotan *et al.* (2004) indicated that the extent to which LMX differentiation influenced group performance is moderated by group process variables such as team cohesiveness and synergy. The LMX differentiation-team performance relationship is significant when cohesion and synergy are high in work teams. While the above research concerning boundary conditions in relation to LMX differentiation and team performance are inspiring, research has not yet begun to delineate the underlying effect of psychological processes in the relationship. Hence, both TMX and team affective climate are conceptualized as important mechanisms that can unravel the complexity of the LMX differentiation-team performance relationship and thus, would make a valuable contribution toward the furthering of the research in this field.

LMX Differentiation and TMX

As stated earlier, leaders develop different LMX relationships with subordinates within work teams (Dansereau *et al.* 1975). Leaders often offer greater levels of work-related benefits and emotional support to high-LMX members than to low-LMX members, in the expectation that the high-LMX members would reciprocate with commensurate attitudes and behaviors (Henderson *et al.* 2008). The quality of LMX relationships is perceived by team members as a conduit through which they receive tangible resources (e.g., salary increments and/or job promotion) and intangible benefits (e.g., psychological support and/or emotional comfort) from their supervisor (Graen and Uhl-Bien, 1995). The differential quality of LMX relationships also represents differences in psychological status because high-LMX members feel “special” and are more likely to receive additional resources and benefits than low-LMX members in their work team (Tse *et al.*, 2012). Low-LMX members may experience feelings of inferiority and neglect

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because they are unable to enjoy the tangible resources and intangible benefits as compared to other high-LMX members in the same work team (Tse *et al.*, 2012). Thus, the high or low degree of LMX differentiation provides team members with a point of reference toward understanding their relative status within a set of differentiated LMX relationships (Liden *et al.*, 2006). This then suggests that LMX differentiation has implications for the quality of TMX between members within work teams.

In respect of this, Heider's (1958) balance theory is a useful lens within which to explain why and how LMX differentiation may influence employee perceptions of TMX relationships. The premise of balance theory in the LMX context between the social relationship triad of supervisor, subordinate and coworker needs to be of equal balance so that all parties feel comfortable about their relationship with one another. The theory implies that if two individual coworkers experience a different relationship with their supervisor, then they are more likely to form a bad relationship with each other. Sheoroy and Green's (2002) field study supported Heider's balance theory by demonstrating that the nature of the relationship between two coworkers is negatively affected when they have different perceptions of their LMX relationships with the same supervisor.

Consistent with balance theory and Sherony and Green's (2002) findings, we argue that low-LMX members are unlikely to develop high-quality TMX relationships with high-LMX members because they experience a different quality of LMX relationship with the same supervisor. When the differentiation is high, team members are less likely to get along well because low-LMX members are often neglected or mistreated in the receipt of less tangible resources and intangible benefits from their supervisor (Erdogan and Bauer, 2010; Liden *et al.*, 2006). Therefore, low-LMX members' perceptions of LMX differentiation are seen as unfair,

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and will elicit experiences of negative emotions such as envy, contempt or resentment toward their supervisor and toward high-LMX members (Anand *et al.*, 2010; Tse *et al.*, 2008). Hence, low-LMX members are unlikely to provide instrumental support in the form of exchanging information and offering constructive feedback, as well as psychological support in the form of listening to problems and showing concern to other high-LMX members (Tse and Dasborough, 2008). High-LMX members may also feel that they do not get any instrumental and psychological support from low-LMX members, leading to lower satisfaction with their TMX relationships. This then culminates in loss of member trust with each other, resulting in within-team disagreement and conflict. This line of discussion is echoed by recent findings showing that LMX differentiation is positively related to disagreement among team members (Ford and Seers, 2006) and perceived conflict within groups (Hooper and Martin, 2008), affirming that LMX differentiation is negatively associated with satisfaction with coworker relations at the individual level (Erdogan and Bauer, 2010). Based on the proceeding discussion and the empirical evidence provided, we argue that LMX differentiation is more likely to lead to problems in relationship development and maintenance among members in work teams, resulting in a negative effect on TMX.

Proposition 1: LMX differentiation is negatively related to TMX.

TMX and Team Performance

As discussed earlier, TMX refers to the relationships between a team member and his/her team mates (Seers, 1989). In this respect, Liden *et al.*, (2000) argued that TMX quality may vary in terms of the content and process of exchange among team members. For example, low-quality TMX is limited to economic exchanges based on formal job requirements, whereas high-quality TMX involves the social exchange of resources and support that goes beyond formal role

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requirements. This suggests that the nature and characteristics of TMX relationships are important for overall effective team performance (Tse and Dasborough, 2008).

Underpinned by social information processing theory (SIP) (Salancik and Pfeffer, 1978), social context influences individuals' conscious expectations regarding their attitude and behavior working in teams. The exchanges within the quality of TMX relationships can be perceived as social contexts in which team members attempt to understand social cues and to determine the extent to which behaviors are expected for team effectiveness (Tse *et al.*, 2005). We argue that the social cues may originate from the unique characteristics of the TMX relationships and the behaviors of other members within the same work team. Recent research has also suggested that team settings provide ample opportunities for team members to learn and observe different work attitudes and behaviors from each other through their interactions (Liao *et al.*, 2010; Seers, 1989; Tse and Dasborough, 2008). This suggests that SIP underpins TMX as a team-level construct for conceptual development and empirical investigation.

On this basis, we contend that high-quality TMX relationships become important social contexts in which team members are more likely to facilitate information exchange, knowledge sharing and interpersonal learning within work teams (Liu *et al.*, 2011). Individual members also tend to choose other high-TMX members (i.e., who are closer to them) as social models to observe and learn from, which help contribute to their role definition and formation of attitudes and behaviors associated with team performance (Ford and Seers, 2006; Liao *et al.*, 2010). For example, high-TMX members may be more proactive in providing instrumental support to other members by offering them constructive feedback, important information and necessary assistance on how they can perform better. This helps other team members to understand the effective skills and strategies for managing the different nature of tasks and the challenges of

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work situations as part of the process for achieving team performance (Liao *et al.*, 2010). Once the characteristics of high-quality TMX relationships are made prevalent in the work team, members will learn and act upon them appropriately. We expect that high-TMX characteristics can be easily spread throughout the work team to form strong overall team member relationships. Team members are therefore likely to be motivated by the existence of an overall relationship that is conducive in assisting others and to share information, ideas and feedback which are important elements for team performance (e.g., Liden *et al.*, 2000; Seers, 1989). Therefore, research has shown that TMX has a positive relationship with team cohesiveness and performance in work teams (Seers *et al.*, 1995), and is positively associated with team knowledge sharing intention, and team performance (Liu *et al.*, 2011).

Interestingly, low-quality TMX relationships also form social contexts in which team members learn social cues about the negative aspects of TMX relationships, formed through other team members. For example, low-TMX members are less likely to interact with others to enhance overall team performance by engaging in information exchange and feedback seeking, and providing emotional support to each other (Liu *et al.*, 2011; Tse and Dasborough, 2008). Once these social cues are established, they become a negative influence and are detrimental to team performance and to the relationships between team members (Tse *et al.*, 2005). Thus in these circumstances, team members are more likely to be discouraged from helping others, sharing information, exchanging ideas and providing emotional support to other team members. Hence, team performance will be negatively affected. On this basis, we propose that high-quality TMX has a positive implication for team performance.

Proposition 2: TMX is positively related to team performance.

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The Mediating Role of TMX

As stated earlier, proposition 1 predicts a negative relationship between LMX differentiation and TMX, and proposition 2 examines a positive relationship between TMX and team performance. These two propositions together specify a model in which LMX differentiation indirectly diminishes team performance by contributing to overall TMX relationships. For example, high-LMX members and low-LMX members find it difficult to work together when LMX differentiation is high, because they may perceive each other as “competitors” for resources and supervisory recognition which then undermines their willingness to accomplish team goals. In contrast, when LMX differentiation is low, team members feel good working together because they perceive each other as “companions” for information exchange, feedback seeking and knowledge sharing that in turn enhance their commitment toward achieving team objectives. Although no empirical evidence is yet available to directly support the mediating role of TMX in the LMX differentiation-team performance relationship, the above discussion and examples regarding propositions 1 and 2 propose that the degree of within-team variation of LMX relationships influences the quality of TMX relationships among members, and thus, may determine the effectiveness of overall team performance. We therefore anticipate that TMX is a strong mediator in the transmitting of the negative effect of LMX differentiation on team performance.

Proposition 3: TMX mediates the relationship between LMX differentiation and team performance.

The Moderating Role of Team Affective Climate

There is growing interest in recognizing affective climate as an important factor in determining individual and team level effectiveness (Ashkanasy *et al.*, 2000). Ashkanasy and

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Nicholson (2003) suggest that the key influences of affective climate relate to the range of shared emotions and experiences that exist within work teams. De Rivera defines affective climate as the collective property of work teams – an objective team phenomenon that can be “palpably sensed” (1992, p.197). Affective climate can also be described as an overall interaction pattern or a shared positive perception among team members where the work atmosphere becomes conducive in characterizing the various types of interactions within a work team (Choi *et al.*, 2003). Affective climate perceptions determine how individuals behave collectively by affecting their feelings and reactions to certain events at work. This is due to the fact that members are often exposed to common ambient stimuli surrounding the social context of work teams (De Rivera, 1992). The shared positive perception of affective climate is underpinned by the attraction-selection-attrition model (ASA) (Schneider, 1987), which argues that team members are more likely to share common characteristics where a social context results in a stronger agreement of climate perceptions that exist among team members both within and across work teams (Ashkanasy *et al.*, 2000). Thus where strong team perception is relatively stable and static, affective climate has been regarded as an important team-level factor in predicting team behavior and outcomes (Tse *et al.*, 2005, 2008).

Consistent with the ASA model, the characteristics of affective climate include warmth, support, acceptance, sincerity and enthusiasm. These characteristics act as social control mechanisms influencing team members’ attitudes and behaviors in response to external stimulus, such as within-team LMX differentiation created by their leader (Choi *et al.*, 2003; Tse *et al.*, 2008). Choi *et al.* (2003) note that a prevalent affective climate will provide all team members with a strong sense of warmth, support and acceptance which influences their cognitive, emotional and motivational processes. We therefore argue that affective climate moderates the

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negative relationship between LMX differentiation and TMX, and such a relationship is amplified when team affective climate is strong rather than when the climate is weak.

Because employees expect that their rights and concerns are recognized and acknowledged in a strong team affective climate, employees are likely to get confused about the characteristics of affective climate when their supervisor differentiates among relationships, showing favoritism to other team members (Tse *et al.*, 2005, 2012). A degree of within-team LMX differentiation may be interpreted by employees as a serious violation of strong team affective climate, making them concerned about what attitudes and behaviors they should have in order to enhance their relative status in their work team. The negative effect of LMX differentiation may become even more salient in work teams with a strong affective climate because small violations may greatly impair overall TMX relationships (Tse *et al.*, 2008). As a result, employees may feel that they become targets of exploitation by their supervisor when the characteristics of strong affective climate are not compatible with their experience of LMX differentiation in their work team. Thus low-LMX members are likely to experience inequities among relationships, as they feel that their rights and concerns are not equally protected that would exacerbate the adverse implication of LMX differentiation for TMX (Tse *et al.*, 2005). Furthermore, when employees experience low levels of fairness in conjunction with low-level relationships with team members they can retaliate (Barrett-Howard and Tyler, 1986) by withholding instrumental and emotional support, and they may distance themselves from high-LMX members as a way of expressing their resentment and anger toward their supervisor (Erdogan and Bauer, 2010). Research also shows that employees may want to withdraw from contexts that are regarded as political and are not consistent to their individual values (Chang *et al.*, 2009). This suggests that incompatible values emphasized by within-team LMX

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differentiation and team affective climate may be disruptive for overall TMX relationship development among both high and low-LMX team members.

Conversely, it is arguable that LMX differentiation plays a less important role in determining the overall quality of TMX relationships within work teams when affective climate is weak. The effect of LMX differentiation on TMX is likely to be less salient because the supervisor is not expected by employees as effective in promoting the strong characteristics of an affective team climate (Choi *et al.*, 2003). Because team affective climate is weak, employees are less concerned about their relative status in a set of differentiated LMX relationships that reduce their tendency of interpersonal comparison (Tse *et al.*, 2005). Team members may tend to be less sensitive and more relaxed about the way their supervisor differentiates among relationships because LMX differentiation is interpreted as a kind of reinforcement to the characteristics of the weak team affective climate they are experiencing (Tse *et al.*, 2005). In this case, LMX differentiation may be less likely to evoke a strong sense of mistreatment and exploitation among team members when not receiving the same amount of tangible resources and intangible benefits from their supervisor (Tse *et al.*, 2012). In line with this notion, we further contend that low-LMX members may not be greatly affected by LMX differentiation that can elicit negative emotions of contempt, resentment and envy toward high-LMX members when their team affective climate is weak. This suggests that a weak team affective climate is less important in shaping the LMX differentiation – TMX relationship. Therefore, we expect a weak negative relationship between LMX differentiation and TMX with low levels of team affective climate, whereas we predict a stronger negative relationship between LMX differentiation and TMX with high levels of team affective climate.

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Proposition 4a: Team affective climate moderates the relationship between LMX differentiation and TMX, such that the relationship is stronger for work teams high in affective climate than for work teams low in affective climate.

Moderated Mediation

Consistent with the proposed relationships specified in our model (Figure 1), it is logical to predict that team affective climate interacts with LMX differentiation to influence TMX and which, in turn, will determine team performance. Thus, it is likely that team affective climate will conditionally influence the strength of the indirect relationship between LMX differentiation and team performance, thereby demonstrating a moderated-mediation between the study variables as depicted in our model. Specifically, we propose that the characteristics of a strong affective climate are incompatible with the norm of LMX differentiation in a team that undermines the willingness of low-LMX and high-LMX members working together to achieve team goals (Tse *et al.*, 2005). The effect of LMX differentiation on TMX will be stronger and thus undermines overall team performance when the team affective climate is strong (Tse *et al.*, 2008). On the contrary, the characteristics of a weak affective climate are less incompatible with the norm of LMX differentiation, low-LMX and high-LMX members are therefore more likely to work together and achieve overall team objectives. Thus the effect of LMX differentiation on TMX and, ultimately, on team performance will be weaker when the team affective climate is weak (Tse *et al.*, 2008). Following our earlier discussions and arguments supporting propositions 1 to 4a, we expect that for work teams high in affective climate, the negative effect of LMX differentiation on TMX, and ultimately on team performance, will be stronger than for work teams low in affective climate.

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Proposition 4b: Team affective climate moderates the indirect effect of LMX differentiation on team performance (through TMX). Specifically, TMX mediates the indirect effect when team affective climate is high, but not when it is low.

DISCUSSION

In this study, we developed an integrated team-level model to understand when and how LMX differentiation is related to team performance (Figure 1). In particular, we highlight several aspects of our model again. First, within-team LMX differentiation is theorized to be negatively associated with TMX. Second, TMX is proposed to have a positive impact on team performance, and it also serves as an important mechanism mediating the LMX differentiation-team performance relationship. Third, LMX differentiation is expected to interact with team affective climate to influence TMX. Lastly, we also theorize that indirect effect of LMX differentiation on team performance when team affective climate is strong rather than it is weak.

Theoretical Implications

We believe that the proposed model contributes to the extant LMX research by extending theoretical base of within-team LMX differentiation in several important ways.

Although the theoretical and practical bases of LMX differentiation have been made explicit in the literature, current LMX research has yet been clear about the LMX differentiation-team performance relationship (Le Blanc and Gozalez-Roma, 2012; Liden *et al.*, 2006). Research examining the underlying psychological processes and boundary conditions of LMX differentiation and team outcomes has only recently begun to attract attention (e.g., Erdogan and Bauer, 2010, Henderson *et al.*, 2009; Liden *et al.*, 2006). Therefore, this study is significant as it is the first to broaden the focus of LMX differentiation research by proposing a team-level moderated-mediation model to explain how TMX (mediator) and affective climate (moderator)

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simultaneously influence the LMX differentiation-team performance relationship. We theorized that the indirect effect of LMX differentiation on team performance is stronger when work teams have high levels of affective climate. This theorizing is important because in work teams where members tend to experience strong affective climate, they are very sensitive to external stimulus such as within-team variations of LMX which is inconsistent with the strong affective climate. The negative implication of LMX differentiation for employees' relationships with other members becomes salient, and can undermine overall team performance. Our study lays a strong theoretical foundation for future research to explore other potential psychological processes and boundary conditions that account for the relationship between LMX differentiation and performance in team contexts.

Our model also provides insights into the mediating role of TMX in the LMX differentiation-team performance relationship. Although LMX researchers have tended to suggest that the degree of within-team LMX relationship variability among team members can be related to team process variables such as team-member relationships, this claim has not yet been discussed thoroughly. For instance, the degree of LMX differentiation shapes the way low-LMX members feel and react to the relationships they form with high-LMX members, and this directly influences how they work together in relation to team effectiveness (Erdogan and Bauer, 2010). This suggests that TMX plays a critical role in transmitting the effect of LMX differentiation on team performance because team members always rely on the quality of their relationships with their supervisor and team members to complete their assigned duties. Ignoring the mediating role of team process variables such as TMX would disguise some of the interesting implication of LMX differentiation. For example, simply looking at the main effect of LMX differentiation would show that LMX differentiation had no influence on team performance, and

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so would yield an incomplete understanding of the dynamic implication of LMX differentiation for team processes and outcomes (Le Blanc and Gozalez-Roma, 2012; Liden *et al.*, 2006; Stewart and Johnson, 2009).

Finally, we extend the research of Boies and Howell (2006), Le Blanc and Gozalez-Roma (2012) and Liden *et al.* (2006) by identifying affective climate as another important boundary condition in relating LMX differentiation to TMX. This is because the existing research has focused on exploring team median of LMX or team mean of LMX as a contextual factor to explain such a relationship. Unlike these three studies, we theorized that the negative LMX differentiation-TMX relationship can be stronger when team affective climate is high. This suggests that a strong team affective climate is incompatible with LMX differentiation created by supervisors that can exacerbate its negative effect on TMX. Studying LMX differentiation in conjunction with other shared perceptions of team characteristics such as team cooperative goals, climate for excellence, service climate with respect to different team outcomes of team efficacy or team creativity, are thus promising avenues for future research to explain the inconclusive findings reported in the extant literature.

Practical Implications

As team performance remains a critical factor for organizational success, this study offers important practical implications. With respect to the implication of LMX differentiation for TMX and performance, supervisors seem to be faced with a dilemma. On one hand, the LMX existing research has demonstrated that where supervisors develop different LMX relationships with different team members, this may become disruptive for team-member relationships and overall performance in work teams (Liden *et al.*, 2006). However on the other hand, supervisors forming similar LMX relationships with all team members may not be possible due to time and

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effort constraints as well as the lack of access to resources (Garen and Uhl-Bien, 1995). This issue then raises further interesting questions: What should supervisors do to more effectively deal with their LMX relationships with team members? Should supervisors continue to form different quality of LMX relationships to produce a better role differentiation? Or, should supervisors spend more time and resources to treat every member the same within work teams?

The key strategy in answering the above questions in this study is to create and maintain a strong team affective climate which has been characterized by warmth, support, acceptance, sincerity and enthusiasm (Choi *et al.*, 2003; Tse *et al.*, 2008). Supervisors also need to make sure that LMX differentiation is compatible with the characteristics of shared perceptions of team climate; otherwise the perceptual incompatibility of situational factors may lead to the enhanced negative effect of within-team variation of LMX relationships on team processes and outcomes. This notion is supported by Erdogan and Bauer's (2010) study suggesting that leaders should make use of collective procedural and distributive climate perceptions to manage employees' reactions to effect high-level LMX differentiation in work teams. By paying attention to developing a team climate compatible with other existing leadership behaviors in work teams will produce an effective climate that may influence team members' attitudes and behaviors, when supervisors have developed different relationships among team members (Erdogan and Bauer, 2010). This may also help employees form and maintain TMX, minimizing unfavorable perceptions regarding the negative effect of LMX differentiation, and may ultimately lead to better team performance.

Limitations and Future Research Directions

The present study has a major limitation that should be addressed in future research. We focused on theorizing TMX and affective climate as key variables in the LMX differentiation-

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team performance relationship, and believe that both variables are the only mechanisms that could influence the relationship. Future research can consider comparing and contrasting the relative importance of other potential mediators such as team potency, team cohesion, task interdependence or team conflict in order to advance our understanding of the precise mechanisms that explain the LMX differentiation-team performance relationship well. For example, it is argued that a high degree of within-team LMX variability among team members may exert a mixed effect on team potency, affective team commitment and team cohesion. The same effect of high-LMX differentiation may more likely lead to its negative relationship with team identification and team trust (Boies and Howell, 2006; Chang *et al.*, 2010; Hooper and Martin, 2008). The anticipated findings of these future research studies would also extend our research by unfolding the complexity of the relationships between LMX differentiation and other performance outcomes such as team OCB, sales performance and team innovation.

CONCLUSION

This study informs the current literature on LMX differentiation. It increases our understanding of whether LMX differentiation is related to team performance, as it is the first to propose a team-level moderated-mediation model of understanding the effects of a psychological process (TMX) and a boundary condition (affective climate) simultaneously on the LMX differentiation-team performance relationship. Our proposed model suggests that the conditional indirect effect of LMX differentiation on team performance only occurs when the levels of affective climate are high rather than low in work teams.

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