Beyond personal Leader–Member Exchange (LMX) quality: The effects of perceived LMX variability on employee reactions

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Abstract

A fundamental tenet of Leader–Member Exchange (LMX) theory is that leaders develop different quality relationships with their employees; however, little research has investigated the impact of LMX differentiation on employee reactions. The current research investigates whether perceptions of LMX variability (the extent to which LMX relationships are perceived to vary within a team) affects employee job satisfaction and wellbeing beyond the effects of personal LMX quality. As LMX variability runs counter to principles of equality and consistency, which are important for maintaining social harmony in groups, it is hypothesized that perceptions of LMX variability will have a negative effect on employee reactions, via its negative impact on perceived team relations. Two samples of employed individuals were used to investigate the hypothesized relationships. In both samples, an individual’s perception of LMX variability in their team was negatively related to employee job satisfaction and wellbeing (above the effects of LMX), and this relationship was mediated by reports of relational team conflict.

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Keywords: LMX; LMX Variability; Conflict

Leader–Member Exchange (LMX) quality has been consistently linked to positive outcomes for employees, such as higher job satisfaction, wellbeing, leader satisfaction, organizational commitment and citizenship behaviors (see, Epitropaki & Martin, 1999, 2005; Gerstner & Day, 1997; Martin, Thomas, Charles, Epitropaki & McNamara, 2005; Townsend, Phillips & Elkins, 2000). As the positive effects of LMX have been well established in the literature, Graen & Uhl-Bien (1995) note that it is time to move beyond investigating leader–member dyads in isolation of the social context, and start to consider the role of LMX in leadership structures such as, teams and organizations. Relevant to this focus, is one of the fundamental tenets of LMX theory – that leaders develop different quality LMX relationships with each of their employees. We currently know very little about how LMX differentiation within teams affects employee reactions beyond the effects of personal LMX quality.

Although explicit value judgments about the effects of LMX differentiation are rare, the early LMX literature suggests that LMX differentiation is a functional and acceptable leadership practice. Other leadership frameworks also suggest the utility of leader differentiation. According to the Individualized Leadership model (Dansereau, 1995;
Dansereau et al., 1995, 1998), successful leaders do not treat all employees the same; rather they individualize their style according to the needs and motivations of each employee.

It has been proposed in the LMX literature that leaders may be able to manage teams (especially large ones) more effectively by establishing good LMX relationships with a select few employees, who in turn can act as the leader’s ‘lieutenant’ or ‘trusted assistant’ in his/her absence (e.g., Dansereau, Graen & Haga, 1975). Such an approach is thought to result in a more efficient use of the leader’s limited time and resources; although this assumption has not been empirically tested.

Despite the potential savings for leaders, on an intuitive level the differential treatment of employees appears problematic. Individuals in teams can be very sensitive to social comparison information (Festinger, 1954), which can influence employee reactions by affecting the self-concept and perceptions of fairness (e.g., Buunk, Collins, Taylor, VanYperen & Dakof, 1990; Crosby, 1976, 1984; Leventhal, 1980; Masterson, Lewis, Goldman & Taylor, 2000; Sinclair, 2003; Tyler, 1989; Tyler & Blader, 2003; Tyler, Degoe & Smith, 1996, 2001; Tyler & Lind, 1992). An obvious reason why LMX differentiation may affect employee reactions is because of the relative advantage afforded to individuals in high quality LMX relationships, but not to individuals in low quality LMX relationships. By definition, high quality LMX relationships involve more tangible and intangible resources being exchanged within the leader–employee dyad, for example: respect, trust, obligation (Graen & Uhl-Bien, 1995), affect, loyalty, professional respect (Dinesch & Liden, 1986; Liden & Maslyn, 1998), information, influence, support (Dansereau et al., 1975), voice (Yrle, Hartman & Galle, 2002), positive performance appraisals (Duarte, Goodson & Klich, 1993, 1994), and career progress (Wakabayasi, Graen, Graen & Graen, 1988). Several authors have suggested that such inequalities in reward distribution may negatively affect relations among team members (e.g., Graen & Uhl-Bien, 1995; Liden, Sparrowe & Wayne, 1997; Sias & Jabin, 1995); however, few empirical studies have examined the impact of LMX differentiation on employee reactions.

The current research aims to address the need for research on the effects of LMX differentiation. LMX differentiation is conceptualized here as the amount of variability in LMX relationships perceived by team members (termed perceived LMX variability). In particular this paper focuses on the effects of an individual’s perception of LMX variability within their team on their personal level of job satisfaction and wellbeing. It is important to clarify that this research looks at perceptions of LMX variability and team conflict, with analyses remaining at the individual level of perception.

1. Literature review and hypotheses

Three key studies have investigated the effects of LMX variability within teams. First, research by Sias & Jabin (1995) provided evidence that LMX relationships affect employees outside of the focal dyad. Specifically, they used discourse analysis to investigate how differential LMX relationships in teams affected perceptions of fairness and coworker communication. The authors identified an attribution bias in cases of favorable treatment by the leader. Specifically, if one’s self was the target of favorable treatment by the leader, the differential treatment was viewed as fair. However, if a coworker was the target of favorable treatment by the leader, the differential treatment was perceived as unfair and the result of factors other than good work (e.g., brown-nosing). When the favorable treatment of a coworker was perceived to be unfair, team members tended to report disliking and distrust of the favored other, and decreased communications with him/her. From the opposite perspective, when the unfavorable treatment of a coworker was perceived as fair, coworkers tended to distance themselves from this “problem” person. The findings therefore suggest that LMX variability may lead to relational problems between differentiated coworkers, including dislike and distrust from low status members, disrespect and rejection from high status members, and ultimately poor within-team communication.

Van Breukelen, Konst & Van Der Vlist (2002) present the first quantitative investigation into the effects of perceived LMX variability within work teams. Referring to Leventhal’s (1980) work on justice perceptions, Van Breukelen et al. (2002) argued that coworkers would prefer the equal and consistent treatment of individuals as opposed to differential treatment by the leader. The authors hypothesized that perceptions of differentiation by the leader would explain additional variance in an individual’s team commitment, beyond that explained by their personal LMX quality. Survey data were collected from 152 employees working for a Dutch municipal water company. Results indicated an interaction between LMX and LMX variability, such that the relationship between LMX and commitment was stronger for individuals in teams with low levels of perceived variability than for individuals in teams with high perceived variability. The authors suggested

that differential treatment by the leader may raise doubts about the integrity of the leader (cf. Tyler & Lind, 1992), or alternatively, raise fears of one’s self becoming a potential ‘victim’ of the leader in the future.

It is important to note, however, that Van Breukelen et al. (2002) did not measure LMX variability directly in terms of LMX quality; rather they measured it in terms of differential treatment in ‘friendliness’ and ‘feedback’ from the leader. As LMX is defined as the quality of the exchange relationship (Schriesheim, Castro & Cogliser, 1999), and is characterized by mutual respect, trust and obligation (Graen & Uhl-Bien, 1995), it is clear that a measure of differential treatment focusing on friendliness and feedback might not be an accurate proxy for LMX variability.

Finally, Sherony & Green (2002) investigated how LMX similarity between two coworkers affected their relationship with each other (i.e., their coworker exchange relationship; CWX). Sixty-seven participants, including engineers and health service personnel completed a questionnaire measuring the quality of their own LMX relationship, as well as the quality of their CWX relationship with each of their coworkers. Coworkers from the same team were matched together in each possible dyad combination, forming 110 coworker dyads. Results showed that when two coworkers had similar LMX relationships, they developed a better CWX relationship with each other, than did coworker dyads whose LMX relationships were different. It is important to note, however, that this research determined LMX variability by comparing personal self-ratings of LMX across individuals in the dyad. It is possible that similarities in personal self-ratings reflect similarities in response style rather than a true perception that others are indeed treated similarly by the leader.

As LMX theory proposes that leaders distribute differential levels of tangible and intangible resources to members of their teams, LMX variability can be conceptualized as a type of non-neutrality on the leader’s part (cf., Colquitt, 2004; Leventhal, 1980; Scandura, 1999). There are several theoretical perspectives that highlight the importance of leader neutrality across employees. For example, the classic work by Deutsch (1975, 1985) proposes that norms of equality (i.e., equal treatment of all individuals) tend to prevail in group situations, and are important for social harmony within groups. The Group Value Model (Tyler, 1989) proposes that leader neutrality is a key factor influencing perceptions of procedural justice within teams and subsequently individuals’ group-oriented behaviors. Similarly, Leventhal (1980) stated that leader consistency across team members is one of the six key procedural justice rules. Each of these three perspectives can help guide predictions about the effects of perceived LMX variability on a variety of outcomes, including perceptions of team relations and employee attitudes.

For example, Deutsch (1975, 1985) proposed that individuals use different fairness norms to assess different situations (see also Leventhal, 1976a,b, 1980; Greenberg & Cohen, 1982; Sias & Jablin, 1995). The two most dominate of these norms are equity and equality. According to the principle of equity (Adams, 1965), reward distributions are fair if they are proportional to the input of each individual, whereas, the equality principle maintains that individuals should share in rewards equally, regardless of personal contributions.

When workplace rewards and benefits are based on equity norms, the situation is said to be competitively structured. Equity rules, which encourage differentiation amongst people, are thought to promote competition and even antagonism among team members, as individuals contest for a larger proportion of available attention and resources (Deutsch, 1975; Greenberg & Cohen, 1982; Vecchio, 2005). For example, Vecchio (2005) demonstrated that competitive reward structures were associated with greater feelings of employee envy, and suggested that this was likely to foster interpersonal distrust and hostility among team members. The general consensus in the team and performance literature is that competitive (or equity) structures promote individual, as opposed to group goals, and have the potential to initiate disharmony in coworker relationships and subsequently poor team performance (e.g., Deutsch, 1975, 1985; Greenberg, 1982; Stanne, Johnson & Johnson, 1999).

On the other hand, when work-related rewards and benefits are based on equality norms, the situation is said to be cooperatively structured. Cooperative structures are thought to promote supportive behaviors among team members, as they create a sense of mutual respect, shared fete, and common interest amongst them (Deutsch, 1975, 1985). Indeed, research shows that when tasks are team-based, cooperative (or equality) structures promote team-member cooperation (Sinclair, 2003), interpersonal attraction, social support and team performance (Stanne et al., 1999). Greenberg (1982) suggested that equality-based distributions are important for promoting positive interpersonal relations and group productivity in situations that are characterized by long-term and/or interdependent relationships, such as in work teams.

Regardless of whether or not LMX variability is determined by the principle of equity (a question for future research), it is clear that LMX variability contravenes the equality principle of fairness (Scandura, 1999). By virtue of their relationship with the leader, employees within the team receive different levels of respect, trust, obligation, as well as other tangible and intangible resources. As equality is thought to enhance cooperation and social harmony in groups (e.g.,
Deutsch, 1975, 1985; Greenberg, 1982; Sinclair, 2003), the presence of differential LMX relationships within teams is likely to result in less positive team relations, such as greater relational team conflict, which is defined as “the perception among group members that there are interpersonal clashes characterized by anger, distrust, fear, frustration, and other forms of negative affect” (Pelled, 1996; p. 620). Such relational team conflict has been consistently linked to low levels of employee satisfaction (e.g., De Dreu & Van Vianen, 2001; De Dreu & Weingart, 2003; Duffy, Shaw & Stark, 2000; Jehn, 1994, 1995; Jehn, Northcraft & Neale, 1999). Specifically, it is thought that relational team conflict negatively impacts on job satisfaction by creating an antagonistic tension-filled working environment (De Dreu & Weingart, 2003).

As personal LMX quality has been strongly related to job satisfaction (Dansereau et al., 1975, Epitropaki & Martin, 1999, 2005; Gerstner & Day, 1997; Martin et al., 2005) and wellbeing (Epitropaki & Martin, 1999, 2005; Martin et al., 2005) in previous studies, it is important to control for the effects of personal LMX quality prior to investigating any incremental effect of perceived LMX variability. Therefore, on the basis of the above mentioned literature, the following hypotheses are proposed:

**Hypothesis 1.** When controlling for personal LMX quality, perceived LMX variability will be negatively related to employee reactions (such as, job satisfaction and wellbeing).

**Hypothesis 2.** The relationship between perceived LMX variability and employee reactions will be mediated by reports of relational team conflict.

### 2. Method

#### 2.1. Participants

Data were collected from two distinct samples. Sample A consisted of 74 employees from diverse organizations and occupational groups. Participants represented customer service/sales (45.9%), administrative (29.7%), healthcare (12.2%) manual (5.4%) and other (6.8%) professions. Of the sample, 70.3% were female, with a mean age and leader–member dyad tenure of 22.51 and 1.03 years, respectively. Team size ranged from 2–20 members, with a mean team size of 7.34 members. Sample B consisted of 357 Australian firefighters (30.64% response rate). Approximately 97% of the sample was male, and the mean age and leader–member dyad tenure were 40.11 and 1.83 years, respectively. Team size ranged from 2–15 members, with a mean team size of 4.15 members. Samples could not be combined, as some variables were measured differently in each sample. We were unable to gain access to data that linked individuals to specific teams; therefore all analyses are conducted at the individual level of analysis.

#### 2.2. Procedure

Questionnaires and instructions were distributed to participants, with no identifying information requested. Sample A participants were instructed to complete the questionnaire and hand it directly to the researcher. Sample B participants were required to post completed questionnaires directly to the researcher.

#### 2.3. Measures

**2.3.1. Leader–Member Exchange (LMX)**

In both samples personal LMX quality was measured using the 7-item LMX-7 scale (Graen & Uhl-Bien, 1995). Internal consistency was acceptable for both Samples A (α=.89) and B (α=.91). Example items included “My supervisor recognizes my potential” and “I would characterize my working relationship with my supervisor as extremely effective”. Responses were made on a 5-point Likert-scale, ranging from “strongly disagree” (1) to “strongly agree” (5).

**2.3.2. Perceived LMX variability**

As team size ranged up to 20 members, a short measure of perceived LMX variability was required. Asking participants to rate each team member on the LMX-7 measure was not practical in the samples used for this research. Perceived LMX variability was therefore measured using a single-item LMX Distribution measure, which was designed for this research (see Appendix A; see Hooper & Martin, 2006, for more details). Participants were asked to rate the LMX relationship quality of each of their team members (including themselves). Specifically, they were
required to indicate the number of people in their team whose relationship quality with the leader could be described as either: “very poor” (1), “poor” (2), “satisfactory” (3), “good” (4) or “very good” (5). They were also asked to indicate how they would describe their own LMX relationship on this scale. The wording of the item focused on relationship quality, which directly aligns with the theoretical definition of LMX relationships (i.e., the quality of the exchange relationship between a leader and an employee; Schriesheim et al., 1999). Accordingly, analyses indicated that personal LMX quality, as indicated on the LMX Distribution measure, had good construct validity when benchmarked against scores on the LMX-7. For example, the correlation between the self LMX rating on the LMX Distribution measure and the self LMX rating on the LMX-7 was high (Sample A, $r=.66, p<.01$; Sample B, $r=.75, p<.01$). Further, the self LMX rating on the LMX Distribution measure produced similar effect sizes to LMX-7 when correlated with known LMX outcomes, such as job satisfaction, leader satisfaction and wellbeing.

From the information collected on the LMX Distribution measure, the perceived mean and standard deviation of LMX scores within the team can be computed. Perceived LMX variability was operationalized by calculating the coefficient of variation, which involved dividing the standard deviation of LMX relationships within the team by the team mean as reported by the participant (see Allison, 1978). The coefficient of variation has been previously used to operationalize LMX variability within coworker dyads (e.g., Sherony & Green, 2002). The current operationalization of LMX variability builds upon previous measures of LMX variability (e.g., Sherony & Green, 2002; Van Breukelen et al., 2002) by examining actual perceptions of LMX variability with an item that directly taps into the LMX construct.

### 2.3.3. Relational team conflict

**Jehn’s (1995)** 4-item team relational conflict scale was used in both Samples A ($\alpha=.92$) and B ($\alpha=.87$). This scale uses the work team as the referent, with participants rating the behaviors and attitudes of the team as a whole. Example items included “How much friction is there among members of your work team?” and “How much tension is there among members of your work team?”. Responses were made on a 5-point scale ranging from “never” (1) to “a lot” (5). High scores indicated high relational conflict within the team.

### 2.3.4. Job satisfaction

In Sample A, a short-scale was used to measure job satisfaction. Specifically, global job satisfaction was measured with **Warr’s (1991)** 3-item job satisfaction scale ($\alpha=.88$). Participants were asked to indicate how, all things considered, they felt about their job. Responses were made on three, 5-point scales. An example scale is: “I don’t enjoy it” (1) to “I really enjoy my job and couldn’t enjoy it more” (5). High scores indicated high job satisfaction.

In Sample B, job satisfaction was measured with **Warr, Cook & Wall’s (1979)** 15-item job satisfaction scale. This scale has two dimensions: extrinsic satisfaction, referring to satisfaction with the environment in which the job is performed ($\alpha=.74$), and intrinsic satisfaction, referring to satisfaction with the nature or content of the job itself ($\alpha=.83$). Respondents were asked to rate their level of satisfaction with different facets of their job (including satisfaction with pay, recognition, coworkers and the supervisor). Responses were made on a 5-point Likert-scale, ranging from “extremely dissatisfied” (1) to “extremely satisfied” (5).

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
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<tbody>
<tr>
<td>Descriptive statistics and correlations for all variables in Sample A ($N=74$)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gender</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Age</td>
<td>22.51</td>
<td>4.72</td>
<td>-.07</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Team size</td>
<td>7.34</td>
<td>4.71</td>
<td>-.06</td>
<td>.09</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Dyad tenure</td>
<td>1.03</td>
<td>1.08</td>
<td>.04</td>
<td>.50***</td>
<td>.19</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5. Hours</td>
<td>20.25</td>
<td>13.14</td>
<td>.12</td>
<td>.40***</td>
<td>.10</td>
<td>.08</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6. LMX</td>
<td>3.32</td>
<td>.82</td>
<td>-.03</td>
<td>.04</td>
<td>.16</td>
<td>.13</td>
<td>-.16</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7. LMX variability</td>
<td>.19</td>
<td>.13</td>
<td>.16</td>
<td>-.15</td>
<td>.32***</td>
<td>-.15</td>
<td>-.03</td>
<td>-.22</td>
<td>-</td>
</tr>
<tr>
<td>8. Team conflict</td>
<td>2.37</td>
<td>.96</td>
<td>-.06</td>
<td>.10</td>
<td>.15</td>
<td>.11</td>
<td>.14</td>
<td>.18</td>
<td>-.04</td>
</tr>
<tr>
<td>9. Job sat</td>
<td>2.61</td>
<td>.85</td>
<td>-.06</td>
<td>.14</td>
<td>.05</td>
<td>-.16</td>
<td>-.27***</td>
<td>.54***</td>
<td>-.23*</td>
</tr>
<tr>
<td>10. Wellbeing</td>
<td>3.92</td>
<td>.78</td>
<td>-.19</td>
<td>.01</td>
<td>.06</td>
<td>-.08</td>
<td>-.15</td>
<td>.49***</td>
<td>-.29**</td>
</tr>
</tbody>
</table>

* $p=.08$.
** $p<.05$.
*** $p<.01$. 

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2.3.5. Wellbeing

Wellbeing was measured using Warr’s (1990) job-related wellbeing scale. This scale consists of two axes (anxiety-contentment and depression-enthusiasm) combined to give a single index of job-related wellbeing. Respondents were asked to indicate how much of the time their job makes them feel a certain way, such as: tense, calm, depressed, and motivated. Responses were made on a 6-point Likert-scale ranging from “never” (1) to “all of the time” (6). Negative affect items were reverse scored. High scores indicated positive wellbeing. In Sample A, a shortened 6-item version of this scale was used ($\alpha = .71$). In Sample B, the full 12-item version was utilized ($\alpha = .90$).

3. Results

Tables 1 and 2 show descriptive statistics and zero-order correlations for variables in Samples A and B, respectively. In line with existing research, personal LMX quality was positively related to employee job satisfaction and wellbeing. Perceived LMX variability was negatively related to employee job satisfaction and wellbeing (supporting Hypothesis 1) and positively related to reports of relational team conflict. LMX and perceived LMX variability were negatively related, and this relationship was significant in Sample B. As personal LMX increased, reports of perceived LMX variability decreased.

Baron & Kenny’s (1986) identify four conditions necessary for mediation to occur and these can be examined via three sets of regression analyses. First, the independent variable (LMX variability) must affect the mediator (team conflict). Second, the independent variable must affect the dependent variable (wellbeing). Third, the mediator must affect the dependent variable. Fourth, the relationship between the independent and dependent variables must be reduced when the mediator is included in the regression model. The results of these analyses are presented in Table 3.

Table 3
Standardized betas for hierarchical regressions for Sample A ($N=74$)

<table>
<thead>
<tr>
<th>Analysis 1</th>
<th>Analysis 2</th>
<th>Analysis 3</th>
<th>Analysis 2</th>
<th>Analysis 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Team conflict</td>
<td>Job satisfaction</td>
<td>Job satisfaction</td>
<td>Wellbeing</td>
</tr>
<tr>
<td>Gender</td>
<td>.01</td>
<td>.03</td>
<td>.04</td>
<td>-.13</td>
</tr>
<tr>
<td>Age</td>
<td>.06</td>
<td>-.04</td>
<td>-.03</td>
<td>.10</td>
</tr>
<tr>
<td>Team size</td>
<td>-.07</td>
<td>.10</td>
<td>.09</td>
<td>.11</td>
</tr>
<tr>
<td>Dyad tenure</td>
<td>.16</td>
<td>-.25**</td>
<td>-.22</td>
<td>-.23</td>
</tr>
<tr>
<td>Hours/week</td>
<td>.17</td>
<td>-.17</td>
<td>-.14</td>
<td>-.10</td>
</tr>
<tr>
<td>LMX</td>
<td>.05</td>
<td>.47****</td>
<td>.48****</td>
<td>.45****</td>
</tr>
<tr>
<td>LMX variability</td>
<td>.39***</td>
<td>-.21*</td>
<td>-.13</td>
<td>-.22*</td>
</tr>
<tr>
<td>Team conflict</td>
<td></td>
<td>-.19*</td>
<td>.36</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.18</td>
<td>.39</td>
<td></td>
<td>.57**</td>
</tr>
<tr>
<td>$F$</td>
<td>1.97*</td>
<td>5.71***</td>
<td>.03</td>
<td>4.57**</td>
</tr>
</tbody>
</table>

* $p<.05$.
** $p<.01$.
*** $p<.001$. 

conflict) [Analysis 1]; second, the independent variable (LMX variability) must affect the dependent variables (job satisfaction and wellbeing) [Analysis 2]; third, the mediator (team conflict) must affect the dependent variables (job satisfaction and wellbeing) whilst controlling for the independent variable (LMX variability) [Analysis 3]; fourth, the relationship between the independent variable (LMX variability) and the dependent variables (job satisfaction and wellbeing) [Analysis 2] must either reliably reduce (the reduction can be tested with the Sobel (1982) test) or become non-significant when controlling for the mediator (team conflict) [Analysis 3]. In all analyses the following control variables were utilized: personal LMX, gender, age, team size and leader–employee dyad tenure (in addition, in Sample A the number of hours worked per week was also controlled due to the diverse range of jobs in the sample). Results from regression analyses are presented in Table 3 for Sample A, and Table 4 for Sample B.

Condition 1 of mediation (Analysis 1) shows that perceived LMX variability was significantly related to reports of relational team conflict in Samples A (β=.39, p<.01) and B (β=.33, p<.01).

Condition 2 of mediation (Analysis 2) shows that perceived LMX variability was negatively related to job satisfaction in Sample A (β=−.21, p<.08) and extrinsic job satisfaction in sample B (β=−.10, p<.05) and negatively related to wellbeing in Samples A (β=−.22, p<.08) and B (β=−.11, p<.05) (however, results only approached significance for Sample A). In Sample B perceived LMX variability did not predict intrinsic job satisfaction (β=−.05, ns) and therefore no further analyses will be reported for this measure. These findings support Hypothesis 1 that when controlling for personal LMX quality, perceived LMX variability is negatively related to employee reactions, including global job satisfaction, extrinsic job satisfaction and wellbeing.

Condition 3 of mediation (Analysis 3) shows that, after controlling for perceived LMX variability, perceptions of team relations was negatively related to job satisfaction in Sample A (β=−.19, p<.08) and extrinsic job satisfaction in Sample B (β=−.19, p<.01) and negatively related to wellbeing in Samples A (β=−.23, p<.05) and B (β=−.18, p<.01).

Condition 4 of mediation shows that the initially significant relationship between perceived LMX variability and employee job satisfaction and wellbeing (Analysis 2) reduced to be non-significant when controlling for perceived team relations (Analysis 3) for both job satisfaction in Sample A (β=−.13, ns) and extrinsic job satisfaction in Sample B (β=−.04, ns) and wellbeing in Samples A (β=.13, ns) and B (β=−.05, ns). The reduction in beta weights was tested with the Sobel (1982) test and was reliable for both job satisfaction in Sample A (Z=1.80, p<.08) and extrinsic job satisfaction in Sample B (Z=3.19, p<.002) and wellbeing in Samples A (Z=1.93, p<.06) and B (Z=2.99, p<.003) (however, results only approached significance for Sample A). Thus, Hypothesis 2 that the relationship between

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1 Although not a main focus of this paper, it is worth noting that personal LMX quality was a strong predictor of employee job satisfaction and wellbeing in both Samples A (satisfaction β=.47, p<.01; wellbeing β=.45, p<.01) and B (intrinsic β=.47, p<.01; extrinsic β=.51, p<.01; wellbeing β=.42, p<.01). This finding is consistent with prior research (e.g., Epitropaki & Martin, 1999, 2005; Martin et al., 2005).

2 Job satisfaction is measured in Sample B using a two-dimensional intrinsic/extrinsic scale. As perceived LMX variability is a contextual variable which forms part of the work environment, rather than being a component of the job itself, it is anticipated that perceived LMX variability will have a stronger affect on extrinsic job satisfaction than intrinsic job satisfaction.
perceived LMX variability and employee reactions (i.e., job satisfaction and wellbeing) would be mediated by reports of relational team conflict, was supported.

4. Discussion

The primary aim of this research was to examine the effects of perceived LMX variability on employee reactions. The findings indicate that perceived LMX variability accounts for additional variance in employee outcomes above that accounted for by personal LMX quality. Whilst personal LMX quality was a strong predictor of employee reactions, perceived LMX variability was related to employee job satisfaction (global and extrinsic, but not intrinsic) and wellbeing, and this relationship was mediated by reports of relational team conflict (although this was stronger for Sample B than Sample A, perhaps due to greater sample size). Specifically, perceptions of LMX variability were associated with higher reports of team conflict, which was related to lower levels of employee job satisfaction and wellbeing.

The findings are consistent with the theoretical literature on equality of treatment and group harmony (e.g., Deutsch, 1975, 1985; Greenberg, 1982), and align with the qualitative research of Sias & Jablin (1995), which indicates that differential treatment of team members by a leader is associated with poor team communication and lower levels of liking, trust and respect among coworkers. Further, the results also align with the research by Sherony & Green (2002), indicating that coworker dyads with dissimilar LMX relationships report lower levels of dyad cohesion.

This research makes several important contributions to the leadership literature. First, little research has investigated the effects of perceived LMX variability on employee reactions. Results from this research provide consistent evidence that perceived LMX variability has negative effects on employee reactions and perceptions about within-team relations, beyond the impact of personal LMX quality. This finding validates repeated arguments made by LMX theorists that research needs to move beyond investigating LMX relationships in isolation of the surrounding social context (e.g., Gerstner & Day, 1997; Graen & Scandura, 1987; Graen & Uhl-Bien, 1995; Kinicki & Vecchio, 1994; Liden et al., 1997; Sparrowe & Liden, 1997; Van Breukelen et al., 2002). Second, the findings imply that leaders may need to exercise caution when fostering different quality relationships among team members. In situations where group solidarity is of primary importance leaders may need to maintain an appearance of treating all team members equally. It is possible, however, that in less interdependent teams, where individual performance is of greater importance than teamwork, differentiated LMX relationships may be more acceptable (cf., Kabanoff, 1991).

Finally, whilst leaders may need to allocate tangible resources (e.g., funds and information) differentially among team members according to task requirements, leaders could be encouraged to distribute non-tangible rewards (e.g., respect, trust and obligation) equally among team members. Indeed, research by Martin & Harder (1994) indicates that leaders are able to differentially distribute resources depending on resource type. That is, some leaders report using equity rules to allocate economic rewards, whilst using equality rules to allocate socio-emotional rewards (e.g., friendliness). The theoretical implications and empirical outcomes for basing differentiation on resource type is a potential avenue for future LMX research.

A potential limitation of the current research was the use of cross-sectional self-report data. Whilst individual perceptions were the focus of this research, making self-report methodologies a likely choice, the potential effects of common-source variance are a concern. In the current research, a novel response format for the key independent variable, perceived LMX variability, was used. The use of different response scales for the independent variable and dependent variables helps to create a ‘cognitive speed bump’ for participants, which can interrupt stylistic responding and ultimately reduce any spurious relationships between the independent and dependent variables (Gardner, Cummings, Dunham & Pierce, 1998; Harrison & McLaughlin, 1993). A Harman’s one factor test also suggested that common-source variance may not have been a substantial problem in this study. Specifically, an un-rotated factor analysis on all study variables revealed the absence of a single global factor, and also demonstrated that perceived LMX variability did not cross load with any other study variables. Although the results suggest that common-source variance may not have been a substantial problem in this research, future research should be designed to further mitigate its potential effects.

Future research could also investigate the role that demographic diversity plays in the relationship between LMX variability and team relations. Specifically, it is possible that demographic diversity within a team is related to both LMX variability and team relations. For example, leaders may be inclined to develop good quality LMX relationships only with employees who possess certain demographic characteristics or are demographically similar to themselves. Thus if the work team was demographically diverse, it would follow that LMX relationships would also be diverse (i.e., indicating high LMX variability). Combine this with research indicating that demographic diversity is related to team conflict (e.g., Jehn et al.,
1999; Pelled, Eisenhardt & Xin, 1999), and the potential role of demographic diversity becomes of interest. Sherony & Green (2002), however, examined the effects of relational demography on coworker relationships and found that similarity in age, organizational tenure, educational level, and gender did not predict the quality of coworker exchange relationships. Although these findings suggest that demographic diversity may not necessarily be a third variable in the relationship between perceived LMX variability and team relations, future research should investigate this possibility. Finally, as mentioned previously, we were unable to conduct group-level analyses with the samples collected. Future research would benefit from examining these hypotheses at the work group level. In particular it would be interesting to determine if perceived LMX variability is consistent across all team members.

Appendix A

LMX Distribution Measure

**Instructions**
The boxes below represent different quality relationships that may exist between members of your work team and your immediate supervisor. Please indicate in each box the number of members in your work team whose working relationship with the supervisor falls within each category (please include yourself in this count). The boxes should add together to equal the number of people in your work team. If unsure, please make a reasonable estimate.

<table>
<thead>
<tr>
<th>Very Poor</th>
<th>Poor</th>
<th>Satisfactory</th>
<th>Good</th>
<th>Very Good</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The quality of the working relationship between myself and my supervisor is… (please circle the appropriate response)

<table>
<thead>
<tr>
<th>Very Poor</th>
<th>Poor</th>
<th>Satisfactory</th>
<th>Good</th>
<th>Very Good</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Example Response:**

<table>
<thead>
<tr>
<th>Very Poor</th>
<th>Poor</th>
<th>Satisfactory</th>
<th>Good</th>
<th>Very Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

This response shows that within a work team of 4 people, 1 person has a poor relationship with the supervisor, and 3 people have a good relationship with the supervisor. The respondent is one of the 3 team members with a good quality relationship with the leader.

References
