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Understanding Why They Don’t See Eye to Eye:
An Examination of Leader–Member Exchange (LMX) Agreement

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Although it is an explicitly dyadic approach to leadership, some leader–member exchange (LMX) research has been characterized by relatively low levels of agreement between leader and member judgments of the relationship. Using a combination of meta-analytic methods and primary data collection, the authors sought to explore several theoretically and methodologically meaningful factors that might account for lower levels of agreement. On the basis of data from 64 independent samples (N = 10,884 dyads), the authors found that overall agreement was moderate in nature (p = .37). In addition, they found that longer relationship tenure, affectively oriented relationship dimensions, and ad hoc sampling techniques showed the highest levels of agreement. Empirical results from 98 matched dyads revealed that the extent of LMX agreement increases as the length of relationship tenure and intensity of dyadic interaction increases. Implications for LMX theory and future empirical research are discussed.

Keywords: leadership, LMX agreement, meta-analysis, role theory

Factors Influencing LMX Agreement

Role Theory and LMX Agreement

Grounded in role theory, Graen and Scandura (1987) theorize that the quality of the leader–member relationship develops over a series of steps in which individuals “test” one another. During the role-taking phase, the leader communicates an explicit role expec-
tation (or assignment) to the member, the member responds, and
the leader evaluates the member’s response. This cycle constitutes
one role episode. The subsequent phase of role making (Graen &
Cashman, 1975) occurs when the role-taking phase results in a
social exchange relationship (Blau, 1964). Social exchange theory
argues that individuals “give approval, as a generalized reinforcer,
to others who give them the activity they value, and so make it
more likely that others will go on giving the activity” (Homans,
1961, p. 129). Finally, regardless of whether a dyad develops
high-quality exchanges, when the dyadic relationship develops a
set pattern of normative behaviors, a concluding phase, role rou-
tinization, occurs (Graen & Scandura, 1987).

Therefore, over a number of interactions, both parties in the
dyad will be better able to determine if there is mutual trust,
respect, and obligation. Thus, one would expect that the degree of
agreement between leader and member ratings of LMX would be
progressively higher as the number of testing episodes increases.
That is, over repeated social interactions, there will be more
common exchange experiences for both parties to rely on as the
basis of their LMX judgments. When that happens, both leader and
member are more likely to evaluate their relationship quality
similarly, leading to greater LMX agreement. The number of
testing episodes may depend on the length of relationship tenure as
well as the frequency and intensity of their interactions. One would
expect that the opportunity to engage in relationship exchanges is
directly related to the length of time the dyad has worked
together. Frequency and intensity of communication greatly
the quantity and quality of those exchanges more explicitly. Yet, no
study to date has tested the basic role-testing premise of LMX
theory directly. Therefore, we expect relationship tenure and com-
munication frequency and intensity will moderate the agreement of
leaders’ and members’ LMX ratings.

**Hypothesis 1:** LMX agreement is positively related to (a) the
length of relationship tenure, (b) frequency of communication,
and (c) intensity of communication, such that the rela-
tionships between leaders’ and members’ LMX ratings are
stronger when the relationship tenure and frequency and
intensity of communication are higher.

**Response Inflation and LMX Agreement**

Another possible reason for low LMX agreement may be su-
permisors’ inflated ratings. In general, the item wordings in LMX
scales focus heavily on the leader. For example, six items in the
LMX-7 scale (Graen & Uhl-Bien, 1995) refer directly to the
leaders’ attitude (e.g., satisfaction with member), cognitions (e.g.,
understand member’s job problems and needs, recognize mem-
ber’s potential), and actions (e.g., help member solve work-related
problems). Because of this focus, leaders are likely to view these
items as a personal evaluation of themselves rather than an eval-
uation of the dyadic relationship. This would suggest that super-
visors’ LMX ratings may be a form of self-rating. Performance
appraisal research has shown that self-ratings are more lenient than
ratings by others, and the correlations of self–other ratings tend to
be lower than correlations of other–other ratings (M. H. Harris &
Schaubroeck, 1988). Overall, the inflated ratings would likely
result in restriction of range in the leaders’ scores, which would in
turn attenuate LMX agreement. Therefore, supervisors are more
likely to overrate the quality of relationship, resulting in lower
agreement with the subordinates’ ratings.

**Hypothesis 2:** LMX agreement is negatively related to super-
visors’ degree of inflation in LMX ratings.

**LMX Dimensionality and LMX Agreement**

Although it has usually been conceptualized, measured, and
studied as a global construct of relationship quality, Dienesch and
Liden (1986) proposed that LMX may develop in a number of
different ways. Specifically, they suggested that LMX can be
differentiated into three types of relationship exchanges, termed
contribution, loyalty, and affect. Contribution refers to task-related
behaviors that each party puts forth for the attainment of mutual
goals. Loyalty refers to both parties’ public support of each other’s
actions and characters. Affect refers to mutual liking that both
parties have for each other. Liden and Maslyn (1998) helped to
advance this idea further by developing an instrument of multi-
dimensional LMX (MDM-LMX). In addition to affect, loyalty, and
contribution, they identified professional respect as the fourth
dimension of LMX. Professional respect refers to the mutual
respect both parties have for each other’s professional capabilities.
However, part of the definition stated that “it is possible, though
not required, to have a perception of professional respect before
working with or even meeting the person” (Liden & Maslyn, 1998,
p. 50). Therefore, although the dimensions of affect, loyalty, and
contribution depend explicitly on dyadic exchanges between lead-
ers and subordinates, the dimension of professional respect does
not. In other words, professional respect is more a function of
personal reputation instead of common exchange episodes encoun-
tered by both parties. As leaders’ professional reputations are
likely to be better established and known than their subordinates’
reputations, there is no reason to expect them to have similar levels
or converge in their ratings on this dimension.

**Hypothesis 3:** LMX agreement is lower for the dimension of
professional respect than for the dimensions of affect, loyalty,
and contribution.

**Methodological Moderators of LMX Agreement**

Finally, we examined two methodological moderators in our
meta-analysis. First, LMX studies tend to employ one of two types
of sampling methods. In the a priori method, matched pairs of
leaders and members are surveyed at the same time on the basis of
some available list that the researchers obtain beforehand (e.g.,
Liden, Wayne, & Stilwell, 1993). In the ad hoc method, either the
leaders or members are surveyed (because these are the partici-
pants the researchers could have direct access to), and they are
instructed to forward the matched version of the member or leader
surveys to the other party of the dyad (e.g., Scandura &
Schriesheim, 1994). Although both methods are commonly used, it
is also possible that these methods might diverge in the types of
samples researchers might ultimately obtain. The partial self-
selection process in the ad hoc method might mean that the initial
sample of participants will forward the surveys to members or
even leaders (with increasing use of team-based and matrix-based
organizations, a member may have multiple superiors to choose
Hypothesis 4: Sampling method moderates the agreement of leaders’ and members’ LMX ratings, such that LMX agreement is higher for studies employing the ad hoc sampling method than for studies employing the a priori sampling method.

The second methodological moderator we consider is the publication status of the studies. Because LMX agreement is usually not the focus of the articles’ research questions, it is less likely for publication bias to be an issue. On the other hand, Graen and Uhlen-Bien (1995) suggested that the degree of leader–member agreement should be used as an index of the quality of data. To the extent that the degree of LMX agreement indirectly reflects the construct validity of LMX in the study, one would expect studies with low LMX agreement to be less likely to be accepted for publication.

Hypothesis 5: Published studies have higher LMX agreement than unpublished studies.

Method

Meta-Analysis

Literature Search

Studies for the present meta-analysis were identified in three ways. First, we conducted electronic searches on the PsychINFO (http://psycnet.apa.org/) and Web of Science (http://thomson-reuters.com/products_services/scientific/Web_of_Science) databases for articles that included “leader–member exchange” or “LMX” in the abstract. Second, we manually searched through the online versions of the conference programs for the Academy of Management (1996–2008) and the Society for Industrial and Organizational Psychology (1998–2008) for papers related to LMX. Finally, when requesting conference papers from authors, which included most of the active LMX researchers, we also solicited additional papers and manuscripts that we might have overlooked. In total, we identified 615 papers that studied or discussed leader–member exchange. Given the research question in the present article, we examined all 615 papers and included only empirical studies that assessed LMX from both leader and member perspectives. In addition, we focused on samples in actual work contexts and excluded studies that sampled students and their group project leaders (e.g., Dockery & Steiner, 1990). With one article reporting two independent samples, our final set includes 63 studies, representing 64 independent samples and a total of $N = 10,884$ dyads. Our primary data collection (see description below) reported in the present article was not included in the meta-analyses.

Coded Variables

Relationship tenure. We coded relationship tenure as the mean number of years the leaders and members had worked together. Across the 27 samples that reported this information, the mean relationship tenure ranged from 0.14 years to 5.48 years.

Standardized mean difference. We operationalized supervisors’ degree of inflation as the standardized mean difference ($d$) in LMX ratings between supervisors and subordinates. We were able to obtain sufficient information from 51 samples to compute the $d$ statistics. The $d$ statistics were computed such that higher values indicate that the supervisors rated the quality of relationship higher than the subordinates. Across the 51 samples, $d$ ranged from $-1.21$ to $1.79$.

Sampling method. Sixty-two studies described their sampling method clearly for the purpose of coding this study variable. Forty-three samples were coded as the a priori sampling condition, and 19 samples were coded as the ad hoc sampling condition.

Publication status. Finally, we coded the publication status of the articles. Of the 64 samples, 33 were from published sources, and 31 were from unpublished manuscripts such as conference papers, dissertations, and working papers.

Meta-Analytic Procedures

We employed Hunter and Schmidt’s (2004) psychometric meta-analytic procedure. The estimated true score correlations were corrected for both sampling error and measurement unreliability. To ensure independence of effect sizes, we combined studies that reported multiple correlations of LMX agreement (e.g., Liden et al., 1993; Maslyn & Uhlen-Bien, 2001) into a single correlation within the study prior to being included in the meta-analysis. To obtain a single correlation for each study, we used the composites formula when possible or averaged the estimates when correlations between dimensions were not provided (Hunter & Schmidt, 2004).

Moderator Analyses

As recommended by Cortina (2003), the methods of moderator analyses were selected based on the nature of the variables. For Hypotheses 1a and 2, where the moderating variables were continuous, weighted least squares (WLS) analyses (weighted by the inverse of their standard errors; Glass, McGraw, & Smith, 1981) were conducted. WLS does not assume homoscedasticity and weights the error variance on the basis of the study’s sample size and the effect size. In their Monte Carlo research, Steel and Kammeyer-Mueller (2002) found that WLS typically provides the most accurate results compared to other meta-analytic moderator estimation techniques such as bivariate correlations and ordinary least squares analyses. For Hypotheses 3 to 5, subgroup analyses were conducted, as the moderating variables were categorical in nature.

Primary Data Collection

Procedure and Participants

As part of a course assignment, junior, senior, and master’s level business students were asked to identify a family member or acquaintance (member) who had worked full time for at least 10 years. The member provided ratings on LMX, relationship tenure, intensity of dyadic interaction, and communication frequency via an electronic survey. The member also provided an electronic link to his or her immediate supervisor (leader), who completed ratings of LMX. This particular sampling strategy was employed so that data could be collected on a wide range of LMX dyads in different
jobs and industries. Similar sampling strategies have been used when the goal has been to sample a wide range of jobs (see Morgeson & Humphrey, 2006). The sample included 98 dyads with an average relationship tenure of 6.64 years ($SD = 6.61$). Average age of the members was 46 years ($SD = 9.5$), and 41 percent were male, whereas leaders were on average 49 years old ($SD = 9.4$), and 61 percent were male.

**Measures**

**LMX.** LMX was assessed using the 12-item MDM-LMX measure (Liden & Maslyn, 1998). The estimated reliabilities were .91 and .94 for member and leader ratings of overall LMX. Reliabilities ranged from .72 to .95 across the four dimensions.

**Dyadic interaction.** Dyadic interaction assessed the intensity of exchanges between leader and member and was assessed with Pearce and Gregersen’s (1991) four-item measure ($\alpha = .81$). An example item is “I work closely with my supervisor in doing my work.”

**Communication frequency.** Communication frequency was measured with six items in which members rated the frequency with which they had face-to-face conversations, exchanged electronic messages, or had phone conversations with their leaders (Kacmar, Witt, Zivnuska, & Gully, 2003). The estimated reliability was .83.

**Results**

As shown in Table 1, the overall true score correlation between leaders’ and members’ ratings of LMX was $p = .37$ ($k = 64$, $N = 10,884$). Sampling error and measurement unreliability accounted for 35.7% of the variance in the primary effect sizes, which suggests that moderators might be present.

Table 2 shows the results of the moderator analyses that were conducted via WLS. Consistent with Hypothesis 1a, LMX agreement was positively and significantly related to the length of relationship tenure ($\beta = .38$, $p < .05$). Relationship tenure accounted for 14.8% of variance in the correlations of LMX agreement across the 27 samples. Given the weighting procedures in WLS and the modest number of samples, a more conservative approach would be to look at the adjusted $R^2$. At 11.4%, the proportion of variance explained based on the adjusted $R^2$ was still substantial. Thus, Hypothesis 1a was supported.

Table 3 provides the descriptive statistics and correlations between the variables for the primary data collection. To empirically test if relationship tenure and intensity and frequency of exchanges moderated the relationships between leaders’ and members’ LMX ratings, we used moderated hierarchical regression analysis. In Step 1, we entered the main effects of member LMX and relationship tenure, dyadic interaction, or communication frequency. In Step 2, we entered the interaction term. All variables were centered before entering them into the regression analyses. Table 4 reports the results from a series of hierarchical models. For overall LMX, results indicated that the moderating effects of relationship tenure ($\beta = .19$, $p < .05$) and intensity of dyadic interaction were significant ($\beta = .21$, $p < .05$), whereas the moderating effect of communication frequency was not significant ($\beta = .12$, ns). Figure 1 shows the moderating effect of relationship tenure on LMX agreement. As shown in Figure 1, member overall LMX was positively related to leader overall LMX for dyads with longer relationship tenure. For dyads with shorter relationship tenure, member overall LMX was not related to leader overall LMX. Thus, Hypotheses 1a and 1c were supported, whereas Hypothesis 1b was not supported in the primary data.

Next, Hypothesis 2 stated that LMX agreement is negatively related to supervisors’ degree of inflation in LMX ratings. We meta-analyzed the $d$ statistics to ascertain the extent to which supervisors inflated the LMX ratings. The sample-weighted effect size was $d = .21$. When corrected for measurement unreliability as well, the population estimate of the effect size was $\delta = .24$ ($k = 51$; $N = 8,912$ dyads; 80% credibility interval, $-.44$ to .92; 90% confidence interval, $-.03$ to .51). Thus, on average, supervisors’ LMX rating was about one quarter of a standard deviation higher than the subordinates’ LMX rating. However, the confidence interval crosses zero, suggesting that

<table>
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<tr>
<th>Variable</th>
<th>$k$</th>
<th>$N$</th>
<th>$r$</th>
<th>$p$</th>
<th>$SD_p$</th>
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<th>80% CV Upper</th>
<th>90% CI Lower</th>
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<td>.21</td>
<td>.46</td>
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<td>.32</td>
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<td>7,562</td>
<td>.30</td>
<td>.34</td>
<td>.11</td>
<td>.21</td>
<td>.48</td>
<td>.31</td>
<td>.38</td>
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<td>ad hoc</td>
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<td>3,058</td>
<td>.27</td>
<td>.43</td>
<td>.09</td>
<td>.31</td>
<td>.55</td>
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<td>.35</td>
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<td>Unpublished reports</td>
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<td>.31</td>
<td>.35</td>
<td>.09</td>
<td>.24</td>
<td>.46</td>
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<td>.38</td>
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Note. $k =$ number of correlations; $N =$ combined sample size; $p =$ estimated true score correlation; $SD_p =$ standard deviation of true score correlation; CV = credibility interval; CI = confidence interval; LMX = leader–member exchange.
the mean effect size was only marginally significant. Sampling error and measurement unreliability only accounted for 8.58% of the variance in the primary effect sizes. That plus the large credibility interval suggests that there is large variability in the d statistics, which is a necessary condition for testing Hypothesis 2. Consistent with the predicted direction, Table 2 shows that d was negatively related to the LMX agreement, but the effect was not significant (β = −.27, p > .05). The proportion of variance explained based on the R² and adjusted R² was 7.1% and 4.5%, respectively. Therefore, Hypothesis 2 was not supported.

Table 2 also shows the results of moderator analysis of LMX agreement using subgroup analysis to test Hypotheses 3 through 5. Hypothesis 3 stated that LMX agreement is lower for the dimension of professional respect than for the dimensions of affect, loyalty, and contribution. As shown in Table 1, affect has the highest true score correlation (r = .38). That was followed by agreement in contribution (r = .33) and loyalty (r = .32). Finally, professional respect has the lowest true score correlation among the four dimensions (r = .21). Unlike typical subgroup analysis, where independent correlations were compared, the identical ks and Ns in this analysis was due to the fact that the agreement for all the dimensions were based on the same nine samples. In such a scenario, the Z-based Pearson-Filon(ZPF) statistic has been recommended for comparing the nonindependent and nonoverlapping correlations (Raghunathan, Rosenthal, & Rubin, 1996). The ZPF tests showed that the population estimates for affect, loyalty, and contribution were significantly higher than the population estimate for professional respect, with Z = 5.05, 3.27, and 3.62, respectively (all ps < .05). On the other hand, the dimensions of affect, loyalty, and contribution were not significantly different from one another (Z ranged from 0.43 to 1.80, all ps > .05). Therefore, the degree of LMX agreement was significantly lower for the dimension of professional respect, whereas the degrees of agreement for the other three dimensions were statistically comparable. Thus, Hypothesis 3 was supported.

In our primary study, we also conducted supplemental analyses and tested if relationship tenure and intensity and frequency of exchanges moderate the degree of agreement for each of the dimensions of LMX, affect, loyalty, contribution, and professional respect. As shown in Table 4, results indicated that for affect, the moderating effect of dyadic interaction was significant (β = .22, p < .05). For loyalty the moderating effect of relationship tenure was significant (β = .19, p < .05), as was the moderating effect of communication frequency (β = .21, p < .05). For contribution, the moderating effect of relationship tenure was significant (β = .25, p < .01). None of the moderating effects were significant for professional respect. All of the significant interactions followed the same pattern shown in Figure 1, in that member LMX was positively related to leader LMX with longer relationship tenure, higher dyadic interactions, or more frequent communication.

Hypothesis 4 stated that LMX agreement is higher for studies employing the ad hoc sampling method than for studies employing the a priori sampling method. As shown in Table 1, the ad hoc sampling method yielded a higher true score correlation between leaders’ and members’ LMX ratings (r = .43, k = 19, N = 3,058) compared to the a priori sampling method (r = .34, k = 43, N = 7,562). The confidence intervals did not overlap, indicating that the difference was statistically significant. Thus, Hypothesis 4 was supported.

Hypothesis 5 stated that published studies have higher LMX agreement than unpublished studies. As shown in Table 1, published reports yielded slightly higher true score LMX agreement (r = .40, k = 33, N = 5,267) than unpublished papers (r = .35, k = 31, N = 5,617). This difference, however, was not statistically significant, as indicated by the overlap in confidence intervals. Therefore, Hypothesis 5 was not supported.

Discussion

The purpose of the present article is to explore the issues and problems surrounding LMX agreement. Specifically, we seek to contribute to the extant literature by investigating various theoretical and methodological factors that might influence the extent of leader–member congruence in their LMX ratings. Compared to the previous meta-analysis of LMX agreement by Gerstner and Day (1997), the present study has more than twice as many effect sizes and triple the sample size. Overall, our meta-analyses confirmed that the true score correlation of LMX agreement is moderate (overall r = .37). Given the moderate correlations between the supervisors’ and subordinates’ LMX ratings, one might question whether LMX is indeed dyadic in nature. The present findings provide three converging pieces of evidence that variability in LMX agreement is actually consistent with LMX theory.

1We want to thank the action editor and an anonymous reviewer for their insight and suggestion regarding another possible moderator. The traditional approach in LMX research is to ask supervisors to report what they provide to each subordinate. However, some recent studies (e.g., Maslyn & Uh/Bien, 2001) have instead asked supervisors to report what the subordinate provides to them. With this approach, low agreement would not necessarily be the result of inflated ratings. It could be that one partner in the dyad is putting more into the relationship. We coded 57 samples that provided usable information for this variable. For 34 samples, the leader ratings of LMX reflected what the supervisor provided to the subordinate, whereas in 23 samples, the leaders reported what the subordinate provided to them. The true score correlations were virtually the same for supervisor-provided, ρ = .3803 (k = 34, N = 5,551; CI = .3440, .4167), and subordinate-provided, ρ = .3844 (k = 23, N = 4,147; CI = .3439, .4249), types of samples.
Table 3
Primary Data Descriptive Statistics and Correlations

<table>
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<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
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<th>12</th>
<th>13</th>
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</thead>
<tbody>
<tr>
<td>1. Member LMX overall</td>
<td>4.21</td>
<td>0.51</td>
<td>(.91)</td>
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<td>2. Member LMX affect</td>
<td>4.20</td>
<td>0.67</td>
<td>.83** (.87)</td>
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<td>3. Member LMX loyalty</td>
<td>4.13</td>
<td>0.62</td>
<td>.88** (.70** (.80)</td>
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<td>4. Member LMX contribution</td>
<td>4.18</td>
<td>0.58</td>
<td>.68** .36** .51** (.72)</td>
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<tr>
<td>5. Member LMX professional respect</td>
<td>4.34</td>
<td>0.67</td>
<td>.82** .57** .63** .39** (.94)</td>
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<td>6. Relationship tenure</td>
<td>6.64</td>
<td>6.61</td>
<td>.09</td>
<td>.04</td>
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<td>7. Dyadic interaction</td>
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<td>0.79</td>
<td>.23*</td>
<td>.24*</td>
<td>.17</td>
<td>.04</td>
<td>.28** .16 (.81)</td>
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<td>8. Communication frequency</td>
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<td>1.08</td>
<td>.45**</td>
<td>.42**</td>
<td>.40**</td>
<td>.24*</td>
<td>.38** .12 .46** (.83)</td>
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<tr>
<td>9. Leader LMX overall</td>
<td>4.26</td>
<td>0.59</td>
<td>.20</td>
<td>.17</td>
<td>.15</td>
<td>.15</td>
<td>.17</td>
<td>.17</td>
<td>.22**</td>
<td>.15</td>
<td>(.94)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Leader LMX affect</td>
<td>4.35</td>
<td>0.65</td>
<td>.15</td>
<td>.18</td>
<td>.11</td>
<td>.12</td>
<td>.06</td>
<td>.17</td>
<td>.14</td>
<td>.26**</td>
<td>.88** (.86)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Leader LMX loyalty</td>
<td>4.05</td>
<td>0.71</td>
<td>.25*</td>
<td>.25*</td>
<td>.17</td>
<td>.18</td>
<td>.19</td>
<td>.21*</td>
<td>.21*</td>
<td>.14</td>
<td>.88** .71** (.84)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Leader LMX contribution</td>
<td>4.17</td>
<td>0.70</td>
<td>.16</td>
<td>.09</td>
<td>.09</td>
<td>.15</td>
<td>.19</td>
<td>.05</td>
<td>.17</td>
<td>.11</td>
<td>.85** .67** .68** (.88)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Leader LMX professional respect</td>
<td>4.47</td>
<td>0.69</td>
<td>.12</td>
<td>.06</td>
<td>.12</td>
<td>.06</td>
<td>.14</td>
<td>.15</td>
<td>.23**</td>
<td>.01</td>
<td>.82** .64** .59** .56** (.95)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Scale reliabilities (Cronbach’s alphas) appear on the diagonal. N = 98. LMX = leader–member exchange.

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

First, building upon the role-testing perspective (Dienesch & Liden, 1986; Graen & Scandura, 1987; Liden, Sparrowe, & Wayne, 1997; Sparrowe & Liden, 1997), we reasoned that as the number of social interactions increases, both parties’ LMX ratings will be based on more common exchange experiences, leading to greater convergence in their evaluations of relationship quality. Consistent with this, we found that the extent of LMX agreement increases as the length of relationship tenure and intensity of dyadic interactions increases. The lack of support for frequency of communication suggests that it is the quality of the testing episodes or what actually happens during the testing episode, and not simply the quantity or number of exchange episodes, that helps to solidify the congruence in overall LMX evaluations. Thus, our results provide some promising empirical support for the role-testing perspective, which is a basic but important premise that underlies the LMX theory. Ideally, the moderating effect of the number of testing episodes should be studied explicitly. For example, future research could follow a sample of newly formed dyads longitudinally and track how role testing exchanges affect the degree of LMX agreement (using methodologies such as critical incident or event analyses; cf. Morgeson, 2005). Alternatively, experience sampling techniques could be employed to examine how discrete events impact relationship development.

Table 4
Moderated Regression Analysis Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>LMX overall</th>
<th>LMX affect</th>
<th>LMX loyalty</th>
<th>LMX contribution</th>
<th>LMX professional respect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1 β</td>
<td>Step 2 β</td>
<td>Step 1 β</td>
<td>Step 2 β</td>
<td>Step 1 β</td>
</tr>
<tr>
<td>Member LMX</td>
<td>.19</td>
<td>.16</td>
<td>.17</td>
<td>.17</td>
<td>.14</td>
</tr>
<tr>
<td>Relationship tenure</td>
<td>.15</td>
<td>.14</td>
<td>.16</td>
<td>.16</td>
<td>.19</td>
</tr>
<tr>
<td>Interaction: Member LMX × Relationship tenure</td>
<td>.19</td>
<td>.05</td>
<td>.19</td>
<td>.19</td>
<td>.02</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.06</td>
<td>.10</td>
<td>.06</td>
<td>.06</td>
<td>.02</td>
</tr>
<tr>
<td>$F$</td>
<td>3.10**</td>
<td>3.34*</td>
<td>2.84*</td>
<td>1.95</td>
<td>3.26*</td>
</tr>
<tr>
<td>Member LMX</td>
<td>.16</td>
<td>.17</td>
<td>.15</td>
<td>.15</td>
<td>.14</td>
</tr>
<tr>
<td>Dyadic interaction</td>
<td>.19</td>
<td>.11</td>
<td>.10</td>
<td>.07</td>
<td>.19</td>
</tr>
<tr>
<td>Interaction: Member LMX × Dyadic Interaction</td>
<td>.21</td>
<td>.22</td>
<td>.14</td>
<td>.14</td>
<td>.08</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.07</td>
<td>.11</td>
<td>.04</td>
<td>.09</td>
<td>.06</td>
</tr>
<tr>
<td>$F$</td>
<td>3.65**</td>
<td>3.96**</td>
<td>2.05</td>
<td>3.02*</td>
<td>3.20*</td>
</tr>
<tr>
<td>Member LMX</td>
<td>.16</td>
<td>.16</td>
<td>.08</td>
<td>.08</td>
<td>.14</td>
</tr>
<tr>
<td>Communication frequency</td>
<td>.08</td>
<td>.11</td>
<td>.23</td>
<td>.24</td>
<td>.09</td>
</tr>
<tr>
<td>Interaction: Member LMX × Communication</td>
<td>.12</td>
<td>.04</td>
<td>.21</td>
<td>.08</td>
<td>.04</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.04</td>
<td>.06</td>
<td>.08</td>
<td>.08</td>
<td>.04</td>
</tr>
<tr>
<td>$F$</td>
<td>2.17</td>
<td>1.92</td>
<td>3.84*</td>
<td>2.60*</td>
<td>1.81</td>
</tr>
</tbody>
</table>

Note. Leader LMX is the dependent variable in all analyses.

*p < .05, one-tailed. **p < .01, one-tailed.
Second, when the research design allowed the participants the opportunity to forward the matched surveys to those with whom they were more familiar, the resulting LMX agreement was higher. On one hand, it demonstrates that LMX is indeed dyadic because familiarity leads to greater degree of agreement. On the other hand, it has implications for how LMX research should be conducted. Although the ad hoc sampling method will be likely to yield higher LMX agreement, it is an open question as to how the self-selection process might influence research results. Future research could investigate the self-selection mechanisms and how they might affect the observed relationships of LMX with other substantive variables.

Third, our results showed that dimensions of LMX that were more dyadic in nature yielded higher levels of agreement. Specifically, affect, loyalty, and contribution, which are the earlier conceptualizations of LMX dimensions and are more closely aligned with the global concept of LMX (Dienesch & Liden, 1986), yielded higher agreement. Conversely, as a relatively newer dimension of LMX, professional respect yielded the lowest agreement. This pattern of results is consistent with the dimension definition for professional respect, where personal reputation was an important component independent of the degree of common exchange episodes encountered by both parties (Liden & Maslyn, 1998).

Our dimension level interaction analyses indicated that the degree of agreement for affect was moderated by intensity of dyadic interaction, agreement in loyalty was moderated by relationship tenure and communication frequency, and agreement in contribution was moderated by relationship tenure. None of the moderating effects were significant for professional respect. Overall, these results suggest that at the dimensional level, the degree of LMX agreement appears to be affected by different mechanisms associated with various aspects of relationship exchanges. This is consistent with Dienesch and Liden’s (1986) idea that LMX may develop in a differentiated manner. Because it is the most affectively oriented dimension, congruence in affect depends on the closeness with which both parties work together such that they have adequate opportunity to display and observe each other’s genuine emotions. For loyalty, it takes time and higher frequency of communication to afford both parties the chance to exhibit sincere public support of each other’s actions and characters. Finally, contribution refers to task-related behaviors that are targeted toward goal attainment, which requires sufficient time to elapse before one could make a more accurate judgment about the values of those behaviors. We recommend that future research further explore the nuances of various dimensions of LMX in terms of their development and congruence.

We also want to note that the supplemental analysis further bolsters the case that professional respect is indeed qualitatively different from the other dimensions of LMX. Being less dyadic in nature, we are concerned that the dimension of professional respect, at least as currently defined and operationalized, might be deviating from the central theme of LMX theory. Having said this, however, it is important to recognize that our meta-analytic results were based on only nine studies, and the interaction analyses of the primary data collection were exploratory in nature. As such, additional research is needed before we reach definitive conclusions about how professional respect fits in with the other LMX dimensions.

Another important question concerns whether low LMX agreement implies that the data are of low quality (as suggested by Graen & Uhl-Bien, 1995). The findings from our study provide empirical evidence that low LMX agreement does not necessarily imply low-quality data. We examined and found that the publication status of the studies was not significantly related to the magnitude of LMX agreement. One possibility is that because LMX agreement is rarely the focus of empirical investigations, the degree of LMX agreement was not a factor in influencing authors’ decision to submit their work or the journals’ acceptance–rejection decision. Thus, the level of LMX agreement does not influence whether a research study is published. However, future research
should seek to further investigate the underlying causes and effects of low agreement.

Finally, we also investigated response inflation by the supervisors as a possible reason for low LMX agreement. Graen and Scandura (1987) commented that supervisors often do not discriminate between low- and high-quality dyads, due to socially desirable responses. In addition, supervisors may perceive LMX ratings as a form of self-evaluation. Ratings in response to these mechanisms will result in a generally elevated mean LMX, which would account for the low degree of LMX agreement between the leaders’ and members’ evaluations of the relationship quality. Although this is an intuitively appealing proposition, the present article is, to our knowledge, the first attempt to test this idea empirically. On the whole, our findings enabled us to reach two conclusions regarding the difference in LMX ratings between supervisors and subordinates. First, the mean effect size was in the predicted direction, but it was relatively small and only marginally significant. Second, the variability in the standardized mean differences was not significantly related to the degree of LMX agreement. Therefore, there was only weak support for (a) the notion that supervisors generally inflated their LMX ratings, and no empirical support for (b) the argument that the degree of LMX agreement was attenuated by such inflated ratings. We recommend that future research needs to explore if the differences in mean LMX ratings are substantively meaningful. For example, drawing upon past research in 360-degree feedback (Atwater & Yammarino, 1997), a similar four-group model could be proposed to categorize dyads as “in-agreement/high quality,” “in-agreement/low quality,” “overrated by supervisors,” and “overrated by subordinates.” Researchers could then investigate various possible causes and consequences of these different patterns of LMX ratings across dyads. A recent paper used this conceptual framework of LMX congruence and demonstrated that in-agreement/low (high) LMX relationships were associated with relatively low (high) levels of follower job performance, organizational commitment, and job satisfaction, whereas the incongruent combinations generally yielded intermediate levels of follower outcomes (Cogliser, Schriesheim, Scandura, & Gardner, in press).

In sum, our findings show that the variability in the degree of LMX agreement is consistent with the role-testing perspective expressed in LMX theory. Thus, LMX researchers should move beyond simply expressing concern about degree of LMX agreement and progress to investigate how the unique and relative perspectives from both parties of the dyad might be related, additively or jointly, to important organizational outcomes. Such investigations offer the promise of advancing our theoretical understanding of leader–member relationships.

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References marked with an asterisk indicate studies included in the meta-analysis.


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