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RESEARCH REPORTS

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 (ρ = .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

Research on supervisor–subordinate relationships has shown convincingly that leaders do not behave consistently toward all subordinates (Dansereau, Graen, & Haga, 1975; Graen, 1976). Instead, leaders form different quality relationships with their subordinates (Liden & Graen, 1980). Essentially, high-quality leader–member relationships (or exchanges; LMX) are characterized by a high degree of mutual trust, respect, and obligation, whereas low-quality LMX is characterized by low levels of the same constructs (Graen & Uhl-Bien, 1995). Given the fact that differential quality of leader–member exchange is prevalent and that LMX is related to several important organizational outcomes (e.g., Gerstner & Day, 1997; Ilies, Nahrgang, & Morgeson, 2007), LMX theory has been identified as "one of the more interesting and useful approaches for studying hypothesized linkages between leadership processes and outcomes" (Gerstner & Day, 1997, p. 827).

An important and unique feature of LMX theory is its emphasis on dyadic relationships. Yet leaders' and members' views of the relationship often do not converge, and concerns about (low) leader–member agreement can be traced back to the origins of LMX theory (Graen & Schiemann, 1978). As part of their larger meta-analytic study, Gerstner and Day (1997) also examined the issue of leader–member agreement. In 24 independent samples that reported usable effects (with a combined sample size of 3,460 dyads), the sample-weighted correlation was .29. When corrected for measurement unreliability, the population estimate of the correlation between leader and member ratings of LMX was .37. They noted that there was significant heterogeneity around the estimated population effect size, and in their outlier analysis, they had to remove nine correlations before a homogeneous effect size was obtained. This suggests that there are other moderating variables influencing the degree of LMX agreement.

A lack of agreement across perspectives is perplexing because LMX theory is supposedly dyadic in nature, and one would think that dyads would view the relationship similarly. Indeed, Graen and Uhl-Bien (1995) commented that "expected agreement between leader and member reports is positive and strong and used as index of quality of data" (p. 237). Thus, there is an important contradiction between the theoretically expected and empirically observed levels of LMX agreement. In the present article, we employ a combination of meta-analytic methods and primary data collection to contribute to LMX theory in three ways. First, we examine the level of agreement in LMX ratings for overall and multidimensional LMX measures. Second, drawing from role theory, we explore theoretically meaningful moderators of leader–member agreement. Third, we explore methodological moderators of LMX rating agreement.

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-

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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 routinization*, 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 a direct function of the length of time the dyad has worked together. Frequency and intensity of communication get at 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 communication 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 relationships 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 supervisors' 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 member'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 evaluation of the dyadic relationship. This would suggest that supervisors' 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 supervisors' 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 multidimensional 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 leaders 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 encountered 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 participants 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

from) with whom they are more familiar. When that is the case, we expect that the degree of LMX agreement will be higher.

> *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 Uhl-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 PsycINFO (http://psycnet.apa.org/) and Web of Science (http://thomsonreuters.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 & Uhl-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 heteroscedasticity 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 (α = .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 ρ = .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 (β = .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 (β = .19, $p < .05$) and intensity of dyadic interaction were significant (β = .21, $p <$ .05), whereas the moderating effect of communication frequency was not significant (β = .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 δ = .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 1
Meta-Analysis Results for Overall and Subgroup Analyses of LMX Agreement

						80% CV		90% CI	
Variable	k	N	r	ρ	SD_ρ	Lower	Upper	Lower	Upper
Leader–member agreement	64	10,884	.32	.37	.11	.23	.51	.35	.40
LMX dimensions									
Affect	9	2,016	.33	.38	.14	.20	.56	.30	.46
Loyalty	9	2,016	.26	.32	.16	.12	.52	.23	.41
Contribution	9	2,016	.27	.33	.10	.21	.46	.27	.40
Professional respect	9	2,016	.18	.21	.09	.10	.32	.15	.27
Sampling method									
a priori	43	7,562	.30	.34	.11	.21	.48	.31	.38
ad hoc	19	3,058	.37	.43	.09	.31	.55	.39	.47
Publication status									
Published reports	33	5,267	.34	.40	.12	.24	.55	.35	.44
Unpublished reports	31	5,617	.31	.35	.09	.24	.46	.32	.38

Note. k = number of correlations; N = combined sample size; ρ = estimated true score correlation; SD_ρ = standard deviation of true score correlation; CV = credibility interval; CI = confidence interval; LMX = leader–member exchange.

Table 2
Results of Moderator Analysis of LMX Agreement Using Weighted Least Squares Analyses

Variable	Unstandardized coefficient	*SE*	Standardized coefficient
Intercept	.249*	.032	
Relationship tenure[a]	.023*	.011	.384
R^2	.148		
Adjusted R^2	.114		
Intercept	.371*	.030	
Standardized mean difference, d[b]	−.083	.050	−.266
R^2	.071		
Adjusted R^2	.045		

[a] $k = 27$. [b] $k = 51$.
* $p < .05$.

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 ($\beta = -.27$, $p > .05$). The proportion of variance explained based on the R^2 and adjusted R^2 was 7.1% and 4.5%, respectively. Therefore, Hypothesis 2 was not supported.[1]

Table 1 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 ($\rho = .38$). That was followed by agreement in contribution ($\rho = .33$) and loyalty ($\rho = .32$). Finally, professional respect has the lowest true score correlation among the four dimensions ($\rho = .21$). Unlike typical subgroup analysis, where independent correlations were compared, the identical *k*s and *N*s 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 *p*s $< .05$). 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 *p*s $> .05$). 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 ($\beta = .22$, $p < .05$). For loyalty the moderating effect of relationship tenure was significant ($\beta = .19$, $p < .05$), as was the moderating effect of communication frequency ($\beta = .21$, $p < .05$). For contribution, the moderating effect of relationship tenure was significant ($\beta = .25$, $p < .01$). 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 for dyads 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 ($\rho = .43$, $k = 19$, $N = 3{,}058$) compared to the a priori sampling method ($\rho = .34$, $k = 43$, $N = 7{,}562$). 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 ($\rho = .40$, $k = 33$, $N = 5{,}267$) than unpublished papers ($\rho = .35$, $k = 31$, $N = 5{,}617$). 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 $\rho = .37$). 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.

[1] We 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 & Uhl-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 useable 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, $\rho = .3803$ ($k = 34$, $N = 5{,}551$; CI = .3440, .4167), and subordinate-provided, $\rho = .3844$ ($k = 23$, $N = 4{,}147$; CI = .3439, .4249), types of samples.

Table 3
Primary Data Descriptive Statistics and Correlations

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Member LMX overall	4.21	0.51	(.91)												
2. Member LMX affect	4.20	0.67	.83**	(.87)											
3. Member LMX loyalty	4.13	0.62	.88**	.70**	(.80)										
4. Member LMX contribution	4.18	0.58	.68**	.36**	.51**	(.72)									
5. Member LMX professional respect	4.34	0.67	.82**	.57**	.63**	.39**	(.94)								
6. Relationship tenure	6.64	6.61	.09	.04	.16	.10	−.01	—							
7. Dyadic interaction	3.53	0.79	.23*	.24*	.17	.04	.28**	.16	(.81)						
8. Communication frequency	4.37	1.08	.45**	.42**	.40**	.24*	.38**	.12	.46**	(.83)					
9. Leader LMX overall	4.26	0.59	.20	.17	.15	.15	.17	.17	.22*	.15	(.94)				
10. Leader LMX affect	4.35	0.65	.15	.18	.11	.12	.06	.17	.14	.26**	.88**	(.86)			
11. Leader LMX loyalty	4.05	0.71	.25*	.25*	.17	.18	.19	.21*	.21*	.14	.88**	.71**	(.84)		
12. Leader LMX contribution	4.17	0.70	.16	.09	.09	.15	.19	.05	.17	.11	.85**	.67**	.68**	(.88)	
13. Leader LMX professional respect	4.47	0.69	.12	.06	.12	.06	.14	.15	.23*	.01	.82**	.64**	.59**	.56**	(.95)

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

	LMX overall		LMX affect		LMX loyalty		LMX contribution		LMX professional respect	
Variable	Step 1 β	Step 2 β	Step 1 β	Step 2 β	Step 1 β	Step 2 β	Step 1 β	Step 2 β	Step 1 β	Step 2 β
Member LMX	.19*	.16	.17*	.17*	.14	.16	.15	.07	.14	.15
Relationship tenure	.15	.14	.16	.16	.19*	.14	.03	.05	.15	.16
Interaction: Member LMX × Relationship Tenure		.19*		.05		.19*		.25**		.15
R^2	.06	.10	.06	.06	.06	.10	.02	.08	.04	.06
F	3.10*	3.34*	2.84*	1.95	3.26*	3.38*	1.16	2.79*	1.97	2.10
Member LMX	.16	.17*	.15	.15	.14	.14	.14	.14	.08	.09
Dyadic interaction	.19*	.11	.10	.07	.19*	.13	.17	.15	.21*	.19*
Interaction: Member LMX × Dyadic Interaction		.21*		.22*		.14		.08		.05
R^2	.07	.11	.04	.09	.06	.08	.05	.06	.06	.06
F	3.65*	3.96**	2.05	3.02*	3.20*	2.70*	2.50*	1.84	2.99*	2.05
Member LMX	.16	.16	.08	.08	.14	.16	.13	.14	.16	.15
Communication frequency	.08	.11	.23*	.24*	.09	.14	.07	.07	−.05	−.05
Interaction: Member LMX × Communication Frequency		.12		.04		.21*		.08		−.01
R^2	.04	.06	.08	.08	.04	.08	.03	.03	.02	.02
F	2.17	1.92	3.84*	2.60*	1.81	2.69*	1.37	1.11	0.99	0.66

Note. Leader LMX is the dependent variable in all analyses.
* $p < .05$, one-tailed. ** $p < .01$, one-tailed.

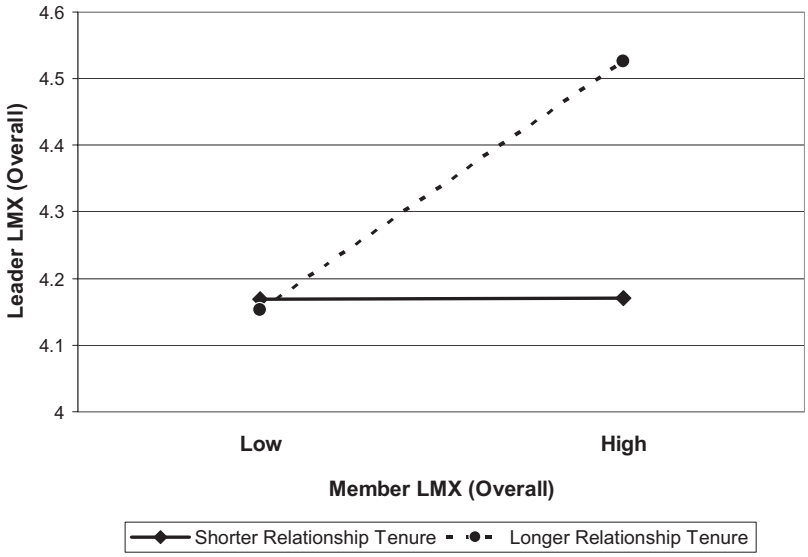

Figure 1. Moderating effect of relationship tenure.

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.

References

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

∗Ang, M. C. H., Ansari, M. A., & Jantan, M. (2005, August). *Upward influence and career outcomes: The mediating role of leader–member exchange and organizational support.* Paper presented at the annual meeting of the Academy of Management, Honolulu, HI.

∗Ansari, M. A., Lee, B. B., & Aafaqi, R. (2007, August). *Leader–member exchange and work outcomes: The mediating role of perceived delegation in the Malaysian business context.* Paper presented at the annual meeting of the Academy of Management, Philadelphia, PA.

Atwater, L. E., & Yammarino, F. J. (1997). Self–other rating agreement: A review and a model. *Research in Personnel and Human Resources Management, 15,* 121–174.

Blau, P. (1964). *Exchange and power in social life.* New York: Wiley.

Cogliser, C. C., Schriesheim, C. A., Scandura, T. A., & Gardner, W. L. (in press). Balance in leader and follower perceptions of leader–member exchange: Relationships with performance and work attitudes. *Leadership Quarterly.*

∗Colella, A., & Varma, A. (2001). The impact of subordinate disability on leader–member exchange relationships. *Academy of Management Journal, 44,* 304–315.

∗Connell, P. W. (2006). Transformational leadership, leader–member exchange (LMX), and OCB: The role of motives. *Dissertation Abstracts International, 66*(11), 6321B. (AAT No. 3197920)

Cortina, J. (2003). Apples and oranges (and pears, oh my!): The search for moderators in meta-analysis. *Organizational Research Methods, 6,* 415–439.

Dansereau, F., Graen, G. B., & Haga, W. (1975). A vertical dyad linkage approach to leadership in formal organizations. *Organizational Behavior and Human Performance, 13,* 46–78.

∗Deluga, R. J. (1994). Supervisor trust building, leader–member exchange and organizational citizenship behaviour. *Journal of Occupational and Organizational Psychology, 67,* 315–326.

∗Deluga, R. J. (1998). Leader–member exchange quality and effectiveness ratings: The role of subordinate–supervisor conscientiousness similarity. *Group & Organization Management, 23,* 189–216.

∗Deluga, R. J., & Perry, J. T. (1994). The role of subordinate performance and ingratiation in leader–member exchanges. *Group & Organization Management, 19,* 67–86.

∗DelVecchio, S. K. (1998). The quality of salesperson–manager relationship: The effect of latitude, loyalty and competence. *Journal of Personal Selling & Sales Management, 18,* 41–47.

Dienesch, R. M., & Liden, R. C. (1986). Leader–member exchange model of leadership: A critique and further development. *Academy of Management Review, 11,* 618–634.

Dockery, T. M., & Steiner, D. D. (1990). The role of the initial interaction in leader–member exchange. *Group & Organization Studies, 15,* 395–413.

∗Duchon, D., Green, S. G., & Taber, T. D. (1986). Vertical dyad linkage: A longitudinal assessment of antecedents, measures, and consequences. *Journal of Applied Psychology, 71,* 56–60.

∗Elicker, J. D. (2001). An organizational justice explanation of feedback reactions in different leader–member exchange relationships. *Dissertation Abstracts International, 61*(7), 3886B. (AAT No. 9980365)

∗Engle, E. M. (1996). Implicit theories, self-schemas, and leader–member exchange. *Dissertation Abstracts International, 57*(3), 2196B. (AAT No. 9623181)

∗Finlinson, S., Chen, P. Y., Haeggberg, D., & Hanley, R. P. (2001, April). *Role of emotional intelligence in the leader–member exchange relationship.* Paper presented at the annual meeting of the Society for Industrial and Organizational Psychology, San Diego, CA.

∗Gandolfo, C. J. (2006). The role of leader–member exchange theory and multi-rater feedback on evaluating the performance appraisal process. *Dissertation Abstracts International, 67*(4), 2265B. (AAT No. 3215013)

Gerstner, C. R., & Day, D. V. (1997). Meta-analytic review of leader–member exchange theory: Correlates and construct issues. *Journal of Applied Psychology, 82,* 827–844.

Glass, G. V., McGraw, B., & Smith, W. (1981). *Meta-analysis in social research.* Beverly Hills, CA: Sage.

∗Glibkowski, B. C., Chaudhry, A., & Wayne, S. J. (2007, August). *Antecedents of leader–member exchange (LMX) reciprocity.* Paper presented at the annual meeting of the Academy of Management, Philadelphia, PA.

Graen, G. B. (1976). Role-making processes within complex organizations.

In M. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1201–1245). Chicago: Rand-McNally.

Graen, G., & Cashman, J. (1975). A role-making model of leadership in formal organizations: A development approach. In J. G. Hunt & L. L. Larson (Eds.), *Leadership frontiers* (pp. 143–166). Kent, OH: Kent State University Press.

Graen, G. B., & Scandura, T. A. (1987). Toward a psychology of dyadic organizing. *Research in Organizational Behavior, 9,* 175–208.

Graen, G. B., & Schiemann, W. (1978). Leader–member agreement: A vertical dyad linkage approach. *Journal of Applied Psychology, 63,* 206–212.

Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader–member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *Leadership Quarterly, 6,* 219–247.

∗Greguras, G. J., & Ford, J. M. (2006). An examination of the multidimensionality of supervisor and subordinate perceptions of leader–member exchange. *Journal of Occupational and Organizational Psychology, 79,* 433–465.

∗Harris, K. J., Kacmar, K. M., & Carlson, D. S. (2006). An examination of temporal variables and relationship quality on promotability ratings. *Group and Organization Management, 31,* 677–699.

∗Harris, K. J., Kacmar, K. M., & Zivnuska, S. (2007). An investigation of abusive supervision as a predictor of performance and the meaning of work as a moderator of the relationship. *Leadership Quarterly, 18,* 252–263.

∗Harris, K. J., Kacmar, K. M., Zivnuska, S., & Shaw, J. D. (2007). The impact of political skill on impression management effectiveness. *Journal of Applied Psychology, 92,* 278–285.

Harris, M. H., & Schaubroeck, J. (1988). A meta-analysis of self–supervisory, self–peer, and peer–supervisory ratings. *Personnel Psychology, 41,* 43–62.

∗Hepperlen, T. M. (2003). Leader–member exchange (LMX) or fulfillment? The role of basic psychological needs in LMX relationships. *Dissertation Abstracts International, 63*(12), 6128B. (AAT No. 3074080)

∗Hiller, N. J. (2006). An examination of leadership beliefs and leadership self-identity: Constructs, correlates, and outcomes. *Dissertation Abstracts International, 66*(12), 6959B. (AAT No. 3202503)

Homans, G. C. (1961). *Social behavior: Its elementary forms.* New York: Harcourt, Brace & World.

∗Huang, X., Wright, R. P., Chiu, W. C. K., & Wang, C. (in press). Relational schema as sources of evaluation and misevaluation of leader–member exchange: Some initial evidence. *Leadership Quarterly.*

∗Hughes, S. A. (1997). Transformational leadership, leader–member exchange, and the effects of leader/member similarity and liking. *Dissertation Abstracts International, 58*(6), 3348B. (AAT No. 9735931)

Hunter, J. E., & Schmidt, F. L. (2004). *Methods of meta-analysis: Correcting error and bias in research findings* (2nd ed.). Newbury Park, CA: Sage.

Ilies, R., Nahrgang, J. D., & Morgeson, F. P. (2007). Leader–member exchange and citizenship behaviors: A meta-analysis. *Journal of Applied Psychology, 92,* 269–277.

Kacmar, K. M., Witt, L. A., Zivnuska, S., & Gully, S. M. (2003). The interactive effect of leader–member exchange and communication frequency on performance ratings. *Journal of Applied Psychology, 88,* 764–772.

∗Keller, T., & Dansereau, F. (2000). The effects of adding items to scales: An illustrative case of LMX. *Organizational Research Methods, 4,* 131–143.

∗Keup, L. C. (2001). A network of working relationships and its influence on individual job outcomes. *Dissertation Abstracts International, 61*(10), 4079A. (AAT No. NQ53060)

∗Ko, J. (2005). Impact of leadership and team members' individualism-collectivism on team processes and outcomes: A leader–member exchange perspective. *Dissertation Abstracts International, 66*(6), 2290A. (AAT No. 3178416)

∗Kunze, M. G. (2006). An examination of the linkages between personality, leader–member exchange, and experienced violation of the psychological contract. *Dissertation Abstracts International, 66*(11), 4093A. (AAT No. 3194527)

∗Langell, J. L. (2007). A look at absenteeism from a social perspective: A multi-level examination. *Dissertation Abstracts International, 68*(3-B), 1971B. (AAT No. 3254371)

∗Liden, R. C., & Graen, G. (1980). Generalizability of the vertical dyad linkage model of leadership. *Academy of Management Journal, 23,* 451–465.

Liden, R. C., & Maslyn, J. M. (1998). Multidimensionality of leader–member exchange: An empirical assessment through scale development. *Journal of Management, 24,* 43–72.

Liden, R. C., Sparrowe, R. T., & Wayne, S. J. (1997). Leader–member exchange theory: The past and potential for the future. *Research in Personnel and Human Resources Management, 15,* 47–119.

∗Liden, R. C., Wayne, S. J., & Stilwell, D. (1993). A longitudinal study on the early development of leader–member exchanges. *Journal of Applied Psychology, 78,* 662–674.

∗Liden, R. C., Wayne, S. J., Zhao, H., & Henderson, D. (in press). Servant leadership: Development of a multidimensional measure and multilevel assessment. *Leadership Quarterly.*

∗Martin, D. F. (1999). The impact of trust on leader–member exchange relationships. *Dissertation Abstracts International, 60*(6), 2125A. (AAT No. 9933461)

∗Maslyn, J. M., & Uhl-Bien, M. (2001). Leader–member exchange and its dimensions: Effects of self-effort and other's effort on relationship quality. *Journal of Applied Psychology, 86,* 697–708.

∗Maslyn, J. M., Uhl-Bien, M., & Mitchell, M. (2007, April). *Exploring leader–member exchange (LMX) from the manager's perspective: Development of a supervisor LMX measure.* Paper presented at the annual meeting of the Society for Industrial and Organizational Psychology, New York, NY.

∗McClelland, C. R., & Holman, D. (2008). *Monitoring and surveillance: Effects on employee performance and well-being.* Unpublished manuscript.

∗Medvedeff, M. E., & Lord, R. G. (2006, April). *Regulatory focus fit: Influences on leader–member exchange.* Paper presented at the annual meeting of the Society for Industrial and Organizational Psychology, Dallas, TX.

∗Minsky, B. D. (2004). LMX dyad agreement: Construct definition and the role of supervisor/subordinate similarity and communication in understanding LMX. *Dissertation Abstracts International, 65*(5), 1864A. (AAT No. 3134753)

∗Moates, K. N. (2008). Perspective taking and leader–member exchange. *Dissertation Abstracts International, 68*(7-A), 3028. (AAT No. 3273375)

Morgeson, F. P. (2005). The external leadership of self-managing teams: Intervening in the context of novel and disruptive events. *Journal of Applied Psychology, 90,* 497–508.

Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology, 91,* 1321–1339.

∗Murphy, S. E., & Ensher, E. A. (1999). The effects of leader and subordinate characteristics in the development of leader–member exchange quality. *Journal of Applied Social Psychology, 29,* 1371–1394.

∗Murry, W. D. (1993). Leader–member exchange and work value congruence: A multiple levels approach. *Dissertation Abstracts International, 54*(6), 2225A. (AAT No. 9331469)

∗Nahrgang, J. D., Spitzmueller, M., & Morgeson, F. P. (2008). *Empower-*

ing employees: The impact on job satisfaction and job performance. Unpublished manuscript, Michigan State University, East Lansing.

∗Paglis, L. L., & Green, S. G. (2002). Both sides now: Supervisor and subordinate perspectives on relationship quality. *Journal of Applied Social Psychology, 32,* 250–276.

Pearce, J. L., & Gregersen, H. B. (1991). Task interdependence and extrarole behavior: A test of the mediating effects of felt responsibility. *Journal of Applied Psychology, 76,* 838–844.

Raghunathan, T. E., Rosenthal, R., & Rubin, D. B. (1996). Comparing correlated but nonoverlapping correlations. *Psychological Methods, 1,* 178–183.

∗Richins, S. I. (2003). Quid pro quo or quid pro quid? An empirical examination of the currencies of exchange approach to leader–member exchange. *Dissertation Abstracts International, 64*(5), 2428B. (AAT No. 3089790)

∗Rosse, J. G., & Kraut, A. I. (1983). Reconsidering the vertical dyad linkage model of leadership. *Journal of Occupational Psychology, 56,* 63–71.

∗Sanchez, R. J. (2006). The role of trust, leader–member exchange, and organizational justice in employee attitudes and behaviors: A laboratory and field investigation. *Dissertation Abstracts International, 66*(7), 3987B. (AAT No. 3183765)

∗Scandura, T. A., & Schriesheim, C. A. (1994). Leader–member exchange and supervisor career mentoring as complementary constructs in leadership research. *Academy of Management Journal, 37,* 1588–1602.

∗Schriesheim, C. A., Castro, S. L., & Yammarino, F. J. (2000). Investigating contingencies: An examination of the impact of span of supervision and upward controllingness on leader–member exchange using traditional and multivariate within- and between-entities analysis. *Journal of Applied Psychology, 85,* 659–677.

∗Schriesheim, C. A., Castro, S. L., Zhou, X., & Yammarino, F. J. (2001). The folly of theorizing "a" but testing "b": A selective level-of-analysis review of the field and a detailed leader–member exchange illustration. *Leadership Quarterly, 12,* 515–551.

∗Seers, A. K. (1982). The job characteristics model and the leader–member exchange model: A longitudinal investigation of the dual attachment concept. *Dissertation Abstracts International, 43*(1), 248A. (AAT No. 8207131)

∗Sherman, K., Kennedy, D. M., Woodward, M. S., & McComb, S. (2008, August). *Bringing "exchange" back to leader–member exchange: Examining congruent and disparate perspectives.* Paper presented at the annual meeting of the Academy of Management, Anaheim, CA.

∗Sin, H. P. (2007). A longitudinal study on the interpersonal dynamics of leader–member exchange development. *Dissertation Abstracts International, 68*(1), 662B. (AAT No. 3248398)

∗Somech, A., & Wenderow, M. (in press). The impact of participative and directive leadership on teachers' performance: The intervening effects of job structuring, decision domain, and leader–member exchange. *Educational Administration Quarterly.*

Sparrowe, R. T., & Liden, R. C. (1997). Process and structure in leader–member exchange. *Academy of Management Review, 22,* 522–552.

∗Sparrowe, R. T., Soetjipto, B. W., & Kraimer, M. L. (2006). Do leaders' influence tactics relate to members' helping behavior? It depends on the quality of the relationship. *Academy of Management Journal, 49,* 1194–1208.

Steel, P. D., & Kammeyer-Mueller, J. D. (2002). Comparing meta-analytic moderator estimation techniques under realistic conditions. *Journal of Applied Psychology, 87,* 96–111.

∗Tekleab, A. G., & Taylor, M. S. (2003). Aren't there two parties in an employment relationship? Antecedents and consequences of organization–employee agreement on contract obligations and violations. *Journal of Organizational Behavior, 24,* 585–608.

∗Townsend, J., Phillips, J. S., & Elkins, T. J. (2000). Employee retaliation: The neglected consequence of poor leader–member exchange relations. *Journal of Occupational Health Psychology, 5,* 457–463.

∗Uhl-Bien, M., & Maslyn, J. M. (2000, August). *Examining the exchange in leader–member exchange (LMX): Identification of dyadic relational styles and their association with key attitudes and behaviors.* Paper presented at the annual meeting of the Academy of Management, Toronto, Ontario, Canada.

∗Varma, A. (1997). An investigation of the impact of subordinate disability and ingratiation on performance evaluations using an LMX (leader–member exchange) framework: An organizational simulation and field study. *Dissertation Abstracts International, 57*(11), 4827A. (AAT No. 9711146)

∗Varma, A., Srinivas, E. S., & Stroh, L. K. (2005). A comparative study of the impact of leader–member exchange in U.S. and Indian samples. *Cross Cultural Management, 12,* 84–95.

∗Varma, A., & Stroh, L. K. (2001). Different perspectives on selection for international assignments: The impact of LMX and gender. *Cross Cultural Management, 8,* 85–97.

∗Wayne, S. J., & Green, S. A. (1993). The effects of leader–member exchange on employee citizenship and impression management behavior. *Human Relations, 46,* 1431–1440.

∗Whittington, J. L. (1998). An integrative model of transformational leadership and follower behavior. *Dissertation Abstracts International, 58*(8), 3216A. (AAT No. 9804688)

∗Wu, J., Chen, C. W., & Liu, Y. (2008, August). *Empirical study on I-P/C model of employee–organization relationship from integrative perspectives.* Paper presented at the annual meeting of the Academy of Management, Anaheim, CA.

∗Yagil, D. (2006). Perceptions of justice within leader–employee dyads. *International Journal of Organizational Theory and Behavior, 9,* 291–306.

∗Yrle, A. C., Hartman, S., & Galle, W. P. (2002). An investigation of relationships between communication style and leader–member exchange. *Journal of Communication Management, 6,* 257–268.

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