

Leader–Member Exchange (LMX) and Culture: A Meta-Analysis of Correlates of LMX Across 23 Countries

Thomas Rockstuhl
Nanyang Technological University

James H. Dulebohn
Michigan State University

Soon Ang
Nanyang Technological University

Lynn M. Shore
San Diego State University

This study extends leader–member exchange (LMX) research by meta-analyzing the role of national culture in moderating relationships between LMX and its correlates. Results based on 282 independent samples ($N = 68,587$) from 23 countries and controlling for extreme response style differences indicate that (a) relationships of LMX with organizational citizenship behavior, justice perceptions, job satisfaction, turnover intentions, and leader trust are stronger in horizontal-individualistic (e.g., Western) contexts than in vertical-collectivistic (e.g., Asian) contexts; and (b) national culture does not affect relationships of LMX with task performance, organizational commitment, and transformational leadership. These findings highlight that although members are universally sensitive to how their leaders treat them, members' responses in Asian contexts may also be influenced by collective interests and role-based obligations.

Keywords: leadership, meta-analysis, national culture

A central tenet of leader–member exchange (LMX) theory is that leaders do not treat each subordinate the same and that LMX quality can range from low to high (Graen & Uhl-Bien, 1995; Liden, Sparrowe, & Wayne, 1997). Social exchange theory is generally used to explain the positive effects of high LMX. P. M. Blau (1964) defined social exchange as involving unspecified obligations created by received favors. As leaders initiate social exchanges by bestowing favorable treatment upon certain members (Graen & Uhl-Bien, 1995), members in turn feel obliged to work harder to benefit the leader as a means of reciprocation (Liden et al., 1997). Thus, a key tenet of LMX theory is that members' work-related attitudes and behaviors depend on how their leaders treat them. Earlier meta-analyses had focused on outcomes of LMX and supported a positive relationship between LMX and performance (Gerstner & Day, 1997), citizenship behavior (Ilies, Nahrgang, & Morgeson, 2007), and attitudes such as job satisfaction, affective and normative commitment, and turnover intentions (Dulebohn, Bommer, Liden, Brouer, & Ferris,

2011). Dulebohn et al. (2011) also provided support for various antecedents of LMX including transformational leadership and leader trust.

To date, the majority of these studies have been based on Western contexts of individualism and low power distance (House, Hanges, Javidan, Dorfman, & Gupta, 2004; Triandis, 2004). However, as Anand, Hu, Liden, and Vidyarthi (2011) have observed, LMX situated in Asia and other parts of the world may operate differently in more collectivistic and higher power distance cultures. For example, LMX is significantly associated with organizational citizenship behavior (OCB) in the United States ($r = .32$; Uhl-Bien & Maslyn, 2003) but not in China ($r = -.06$; Loi & Ngo, 2009). Similarly, whereas LMX is strongly associated with job satisfaction ($r = .69$; Pillai, Scandura, & Williams, 1999) and reduced turnover intentions ($r = -.55$; Francis, 2010) in the United States, LMX is more weakly related to job satisfaction ($r = .21$) in China (Yi, 2002) and is unrelated to turnover intentions ($r = -.02$) in India (Mehta, 2009). Similarly, Dulebohn et al.'s (2011) meta-analysis found that leader trust was more weakly related to LMX in more collectivistic and higher power distance cultures. Findings such as these prompted Anand et al. (2011) and Dulebohn et al. to call for further research on how culture affects antecedents and outcomes of LMX. We respond to their call by systematically examining the role of national culture in moderating relationships between LMX and its correlates.

Below, we develop our research hypotheses and report our meta-analysis comprising 282 independent samples ($N = 68,587$) from 23 countries that examined relationships of LMX with (a) the outcomes of task performance, OCB, justice perceptions, job satisfaction, commitment, and turnover intentions; and (b) the antecedents of transformational leadership and leader trust.

This article was published Online First September 17, 2012.

Thomas Rockstuhl, Nanyang Business School, Nanyang Technological University, Singapore; James H. Dulebohn, School of Human Resources and Labor Relations, Michigan State University; Soon Ang, Nanyang Business School, Nanyang Technological University; Lynn M. Shore, Department of Management, College of Business Administration, San Diego State University.

Correspondence concerning this article should be addressed to Thomas Rockstuhl, Nanyang Business School, Nanyang Technological University, Block S3 01C-108, 50 Nanyang Avenue, Singapore 639798. E-mail: thomas.rockstuhl@gmail.com

Theory and Hypotheses

Configurational Approach to National Culture

Hofstede (2001, p. 9) defined culture as “the collective programming of the mind that distinguishes the members of one group or category of people from another.” There are two approaches to theorizing about the effects of national culture. The conventional approach uses individual cultural value dimensions as predictors. A more novel approach uses configurations of cultural values (Triandis, 1995; Tsui et al., 2007). The configurational approach is especially appropriate to studying culture at the national level of analysis because societal cultural values tend to co-occur. For example, Triandis and colleagues (Singelis, Triandis, Bhawuk, & Gelfand, 1995; Triandis, 1995; Triandis & Gelfand, 1998) discovered national culture configurations of horizontal individualism and vertical collectivism because societies that are higher in collectivism are also likely to be higher in power distance, whereas those that are lower in collectivism are also likely to be lower in power distance.

The horizontal individualism/vertical collectivism configurations proposed by Triandis and colleagues thus distinguish national cultures based on configurations of two cultural values (Singelis et al., 1995; Triandis, 1995; Triandis & Gelfand, 1998). The first cultural value is individualism–collectivism (independent vs. interdependent self), and the second cultural value is power distance (equal status between people vs. emphasizing respect for authorities). Specifically, people in horizontal-individualistic cultures are more likely to regard themselves as independent of and equal in status with others. By contrast, those in vertical-collectivistic cultures are more likely to describe themselves as interdependent with others and hold greater respect for authority. Societies in the West are likely to fit into the horizontal-individualistic configuration, whereas societies in Asia tend to fit into the vertical-collectivistic configuration.

Taras, Kirkman, and Steel (2010) found that individualism–collectivism and power distance were the strongest predictors of a range of outcomes at the societal level. These two values are also dominantly associated with cross-cultural leadership (Dorfman & Howell, 1998; Ng, Koh, Ang, Kennedy, & Chan, 2011), and LMX in particular (Anand et al., 2011). Yet, because national cultural values such as individualism–collectivism and power distance are strongly correlated ($r = .67$; Hofstede, 2001), they cannot be studied together without multicollinearity concerns (Fiss, 2007; Meyer, Tsui, & Hinings, 1993).

Hence, we focus on societal configurations of individualism–collectivism and power distance when examining the moderating role of national culture on relationships between LMX and its correlates. Although Triandis and colleagues suggest four cultural configurations, out of the 558 LMX studies identified in our literature search, only five studies came from horizontal-collectivistic or vertical-individualistic societies. Therefore, we consider the joint effects of individualism–collectivism and power distance by contrasting the strength of the relationship between LMX and its correlates in only horizontal-individualistic and vertical-collectivistic cultures.

The Moderating Effect of National Culture on Relationships Between LMX and Outcomes

Individualism–collectivism describes how an individual sees her- or himself in relation to the collective, whereas power distance

describes the extent to which individuals accept social stratification and unequal distributions of power in society (Hofstede, 2001). Because of their individualistic orientations, people in horizontal-individualistic cultures are more likely to view self as independent of others, to emphasize personal goals, and to base their social behaviors more on personal attitudes and on how others treat them (Singelis et al., 1995). Furthermore, because of their lower power distance orientation, people in horizontal-individualistic cultures are more likely to view themselves as equal with others (Shavitt, Lalwani, Zhang, & Torelli, 2006). Thus, personal relationships and liking are more likely to influence how an individual reacts to people in authority (Dickson, Den Hartog, & Mitchelson, 2003).

By contrast, vertical-collectivistic cultures view the self as interdependent with others, emphasize aligning goals with collective interests, and stress perceived duties and obligations in social behavior (Triandis, 1995). Furthermore, individuals in vertical-collectivistic cultures tend to emphasize greater respect for authority due to their higher power distance orientation (Shavitt et al., 2006). Consequently, people in vertical-collectivistic cultures respond to authority figures based on not only personal relationships or liking but also role-based obligations (Dickson et al., 2003). In sum, there is a stronger deference to and respect for authority associated with vertical collectivism that provides a basis for predicting weaker effects of LMX in these cultures.

The horizontal individualism/vertical collectivism distinction has direct implications for how strongly LMX relates to various outcomes. A fundamental assumption of LMX theory in explaining the positive effects of LMX is that members' responses depend on how their leaders treat them (Liden et al., 1997). In other words, LMX theory describes members' attitudes and behavior as a contingent response to leader treatment, which may vary among members. Because personal relationships with leaders and how these benefit members' personal goals matter to members in horizontal-individualistic cultures (Triandis & Gelfand, 1998), they are particularly likely to base their attitudes and behaviors on how their leaders treat them (Farh, Hackett, & Liang, 2007). Thus, we expect strong relationships between LMX and outcomes in nations with horizontal-individualistic cultures.

Of greater interest in our study is how the relationships between LMX and outcomes are influenced by vertical-collectivistic orientations. We argue that relationships between LMX and outcomes are stronger in horizontal-individualistic than in vertical-collectivistic cultures. We expect this because even though members in both cultures are sensitive to leader treatment, members' responses in vertical-collectivistic cultures are more likely to be influenced by collective interests and role-based loyalty. In vertical-collectivistic cultures, people emphasize pursuing interests of the collective and respect for authorities (Shavitt et al., 2006). This has two major implications for how strongly LMX relates to members' work behaviors and attitudes.

First, as van Knippenberg and Hogg (2003) noted, “leaders not only lead groups of people, *but are also themselves members of these groups*” (p. 244; emphasis in original). Because of their interdependent view of the self, members in vertical-collectivistic cultures are more likely than members in horizontal-individualistic cultures to see their leaders' interests as representing the interests of the collective (M. Chen & Miller, 2011). More importantly, vertical-collectivistic cultures emphasize aligning goals with col-

lective interests even when they are in conflict with personal goals (Triandis, 1995). As a consequence, members in vertical-collectivistic cultures are more likely than members in horizontal-individualistic cultures to work hard for their leader even when they are not receiving favors from the leader in return (Y. Chen, Friedman, Yu, Fang, & Lu, 2009).

Second, the tendency to give unquestioning respect for authority in vertical-collectivistic cultures is likely to affect how members might respond to their leaders. As Y. Chen et al. (2009) noted, "Subordinates are expected to show unreserved loyalty and obedience toward their superiors" (p. 380). Because of their generally stronger respect for authority, members in vertical-collectivistic cultures are less likely to base their attitudes and behaviors solely on leader treatment. Instead members' attitudes and behaviors, in response to how leaders treat them, are also influenced by role-based loyalty (Jiang & Cheng, 2008) and deference to leaders (Wasti & Can, 2008). Consequently, changes in how well a leader treats members should have less of an impact on members' work behaviors and attitudes in vertical-collectivistic compared with horizontal-individualistic cultures.

Hypotheses 1: The positive associations between LMX and (a) task performance, (b) OCB, (c) distributive justice, (d) procedural justice, (e) interactional justice, (f) job satisfaction, (g) affective commitment, and (h) normative commitment and the negative association between LMX and (i) turnover intentions are stronger in samples from horizontal-individualistic countries than they are in samples from vertical-collectivistic countries.

Moderating Effect of National Culture on Relationships Between Antecedents and LMX

Leaders determine the quality of LMX relationships to a greater extent than members (Dienesch & Liden, 1986; Graen & Scandura, 1987). In higher quality relationships, leaders offer benefits for the member, including consideration of members' needs, assistance with problems at work, emotional support, and formal and informal rewards (Gerstner & Day, 1997). Previous studies have examined transformational leadership (e.g., Pillai et al., 1999), leaders' trust in members (e.g., Gómez & Rosen, 2001), and other leader, member, or interpersonal relationship characteristics (see Dulebohn et al., 2011) as antecedents of LMX quality. Because our study was limited by the available cross-cultural samples, we could only examine transformational leadership and leader trust.

Based on the norm of reciprocity (Gouldner, 1960), LMX theory suggests that positive evaluations of LMX quality engender positive work behaviors and attitudes by members (Liden et al., 1997). Similarly, we expect this norm to affect relationships between antecedents and LMX. In this case, we hypothesize that beneficial behaviors by the leader give rise to positive evaluations of LMX from their members. Leaders who use their power to help members solve problems at work, support members' actions, and consider members' needs evoke positive evaluations of LMX quality in members (Scandura & Graen, 1984). Such leader treatment is similar to individualized consideration, which is described in studies of transformational leadership. Individualized consideration refers to the degree to which leaders support members and attend to their needs (Bass, 1985). Leaders who provide higher support

and attention to members' needs evoke more positive LMX perceptions in those members through processes of personal identification (Wang, Law, Hackett, Wang, & Chen, 2005). As Deluga (1992) noted, "Transformational leaders may foster the formation of high quality relationships and a sense of a common fate with individual subordinates" (p. 245).

Trust refers to a person's willingness to be vulnerable to another party whose behavior is not under his or her control (Zand, 1972). As Liden and Graen (1980) noted, the extent to which leaders provide preferential treatment to members, depends on the extent to which leaders trust members. That is, leaders treat members favorably based on the "extent to which they can be trusted (especially when not being watched by the supervisor)" (Liden & Graen, 1980, p. 451). When leaders display trust in a follower, they are signaling that a high-quality relationship exists (Brower, Schoorman, & Tan, 2000). Thus, leader trust plays a crucial role in the development of higher quality LMX relationships because trust engenders expectations about mutual concern—or a sense of common fate—with individual members (Bauer & Green, 1996).

We suggest that, taken together, transformational leadership and leader trust are positively related to LMX because associated leader behaviors that benefit members evoke positive LMX evaluations under norms of reciprocity. Although empirical evidence in horizontal-individualistic cultures supports this notion, research in vertical-collectivistic societies has found weaker associations between transformational leadership and leader trust with LMX. For example, Pillai et al. (1999) found that transformational leadership is more strongly related to LMX in Australia ($r = .69$) than in Saudi Arabia and Jordan ($r = .24$). Similarly, leader trust was more strongly related to LMX in the United States ($r = .69$; Hansen, 2010) than in China ($r = .32$; Wat & Shaffer, 2005).

As with our earlier arguments, we propose that relationships of transformational leadership and leader trust with LMX are weaker in vertical-collectivistic than in horizontal-individualistic cultures. We expect this attenuation because members' perceptions of LMX in vertical-collectivistic cultures are not only influenced by how their leaders treat them, but also by interdependent self-views and role-based obligations. In vertical-collectivistic nations, members evaluate exchange relationships with their leaders based on not only how those exchange relationships meet their personal needs (Hui, Lee, & Rousseau, 2004), but also mutually prescribed roles and responsibilities (Y. Chen et al., 2009; Vodosek, 2009). When relationships are constrained by role-based obligations for both the subordinate and supervisor, as is the case in vertical-collectivistic societies, then such leader behavior is likely viewed as less important in determining the quality of the relationship between the leader and the follower. By contrast, in horizontal-individualistic cultures where particularistic relationships with the leader are perceived as more influential in the treatment of individual subordinates, displays of transformational leadership and leader trust provide critical information about the quality of the relationship and associated treatment. Thus, changes in transformational leadership or leader trust are more strongly related to changes in members' perceptions of favorable treatment and LMX in horizontal-individualistic than in vertical-collectivistic cultures.

Hypothesis 2: The positive associations of (a) transformational leadership and (b) leader trust with LMX are stronger in

samples from horizontal-individualistic countries than they are in samples from vertical-collectivistic countries.

Method

We conducted a systematic search of the LMX literature, using several methods. First, we conducted a keyword search in the ABI/Inform, PsycINFO, ProQuest Dissertation, and Google Scholar databases using broad keywords such as *leader-member exchange*, *LMX*, and *vertical dyad linkage*. Second, we complemented this search with a backward citation search in which we conducted a manual review of articles identified by Erdogan and Liden (2002); Gerstner and Day (1998); Ilies et al. (2007); Liden and Maslyn (1998); and Liden et al. (1997). Third, we used a forward citation search of the prominent LMX measures by Scandura and Graen (1984) as well as Liden and Maslyn (1998). We also searched for LMX articles from the bibliographies of the articles identified in the first three searches. Finally, we searched for in-press articles in leading management journals and contacted authors who actively conduct research in this area for unpublished articles.

This search resulted in an initial pool of 558 LMX studies from 1975 to 2011. Next, we excluded studies that did not report sample sizes along with adequate effect size measures or examined effects of LMX quality only at the group level. Our final database included a total of 253 studies conducted in 23 countries. These studies reported a total of 282 distinct samples and 602 correlations between member-rated LMX and antecedent and outcome correlates with a total sample size of 68,587 (see Appendix A).

Three raters independently coded each study in terms of sample size, effect size, variances, and reliabilities of LMX and its correlates, country of study, and type of LMX correlate. The average intercoder percentage of agreement across the study variables was 95%. For any disagreements, the three coders reached consensus through discussion following the approach used by Podsakoff, Bommer, Podsakoff, and MacKenzie (2006).

Test of Hypotheses

We classified studies into horizontal-individualistic or vertical-collectivistic cultural configurations based on the country in which data were collected. Ideally, we could use cultural values directly assessed in LMX studies to classify individual studies. Unfortunately, studies do not report these data regularly. Thus, we used the median split of Hofstede's (2001) country-level scores of collectivism and power distance to determine which configuration best applied to each society. Taras et al.'s (2010) findings suggest that country-level scores have lower predictive power than cultural values assessed in specific study samples. Hence, using country-level scores presents a more conservative test of the potential effects of culture.

We then conducted separate meta-analyses for horizontal-individualistic and vertical-collectivistic configurations. We used Hunter and Schmidt's (2004) meta-analytic methods to estimate the population correlations between LMX and its correlates in both cultural configurations. We corrected each primary correlation for attenuation due to unreliability in both the predictor and the criterion. When reliabilities for LMX or its correlates were not reported in the original studies, we used the population estimates

of internal consistency based on reliability generalization procedures to correct the primary correlations (Rodriguez & Maeda, 2006). To test our moderation hypotheses, we followed procedures advocated by Aguinis, Sturman, and Pierce (2008) that compare estimated true correlations between studies in horizontal-individualistic and vertical-collectivistic cultural configurations.

Test of Extreme Response Style Differences

Van de Vijver and Leung (1997) suggested that differences in relationship strength across cultures could be due to cultural differences in extreme response style instead of substantive cultural differences. Extreme response style refers to the tendency to use the extreme categories of rating scales (Cheung & Rensvold, 2000). Empirical research shows that Western cultures are more likely to use extreme categories of rating scales, whereas Asian cultures are more likely to use middle categories of rating scales (Harzing, 2006; T. Johnson, Kulesa, Cho, & Shavitt, 2005). The greater use of middle categories in Asian cultures lowers construct variances in Asian compared with Western cultures (Little, 2000). If vertical-collectivistic cultures show lower variances in LMX or its correlates, then range restrictions may attenuate correlations in vertical-collectivistic compared with horizontal-individualistic cultures (Hunter, Schmidt, & Le, 2006).

We address this potential confound in two steps. First, Little (2000) suggests that extreme response style differences are present when construct variances vary systematically across cultures. Thus, we tested for differences in all construct variances across both cultural configurations following random-effects regression procedures described by Lipsey and Wilson (2000). Second, for constructs that showed significantly different variances, we corrected individual relationships between LMX and these constructs in vertical-collectivistic societies using range restriction corrections suggested by Hunter et al. (2006). We estimated the range restriction ratio (u_r) as the ratio between the study-specific construct variance and the average construct variance estimated for horizontal-individualistic studies. By applying appropriate correction procedures, our study offers a unique opportunity to examine the degree to which range restrictions account for observed differences in the relationship strengths across cultures. Hence, this article advances a methodological improvement over previous meta-analyses that have not considered range restriction as an alternative explanation when comparing relationships across cultures.

Results

Test of Hypotheses

Table 1 shows the results of our test of Hypothesis 1. We hypothesized in Hypothesis 1 that members in horizontal-individualistic countries would show a stronger association between LMX and a range of outcomes than members in vertical-collectivistic countries. In terms of behavioral outcomes, the results demonstrate that the relationship between LMX and OCB is stronger in horizontal-individualistic ($\rho_{HI} = .35$) than in vertical-collectivistic ($\rho_{VC} = .28$) cultures ($t = 2.36, p < .01$). However, the relationship between LMX and task performance is not different in horizontal-individualistic ($\rho_{HI} = .30$) and vertical-

Table 1

Results of Moderator Analysis of National Culture on Relationships Between Leader–Member Exchange (LMX) and Outcome Correlates

LMX correlate	<i>N</i>	<i>k</i>	<i>k_c</i>	<i>r</i>	ρ	<i>SD_ρ</i>	80% CV	95% CI	<i>t</i>
Task performance									
Horizontal individualism	23,024	99	3	.29	.30	.11	[0.16, 0.45]	[0.27, 0.33]	0.32
Vertical collectivism	4,541	17	7	.26	.29	.11	[0.16, 0.43]	[0.23, 0.36]	
Organizational citizenship behavior									
Horizontal individualism	11,950	62	2	.30	.35	.12	[0.20, 0.50]	[0.31, 0.38]	2.36**
Vertical collectivism	5,565	22	9	.25	.28	.11	[0.13, 0.42]	[0.21, 0.34]	
Distributive justice									
Horizontal individualism	4,885	22	2	.46	.51	.19	[0.27, 0.76]	[0.44, 0.59]	2.77**
Vertical collectivism	2,351	12	7	.30	.36	.13	[0.19, 0.53]	[0.28, 0.44]	
Procedural justice									
Horizontal individualism	4,651	21	2	.55	.63	.19	[0.39, 0.87]	[0.55, 0.71]	2.58**
Vertical collectivism	2,793	12	7	.42	.50	.10	[0.38, 0.63]	[0.44, 0.57]	
Interactional justice									
Horizontal individualism	4,264	14	1	.65	.79	.14	[0.61, 0.97]	[0.72, 0.86]	1.72*
Vertical collectivism	1,321	6	4	.54	.62	.23	[0.33, 0.91]	[0.41, 0.83]	
Job satisfaction									
Horizontal individualism	17,473	78	7	.46	.55	.15	[0.35, 0.74]	[0.51, 0.58]	3.09**
Vertical collectivism	4,608	19	7	.42	.45	.11	[0.31, 0.59]	[0.39, 0.51]	
Affective commitment									
Horizontal individualism	16,675	70	5	.42	.48	.10	[0.35, 0.61]	[0.45, 0.51]	1.44
Vertical collectivism	6,706	22	11	.44	.52	.12	[0.36, 0.68]	[0.46, 0.58]	
Normative commitment									
Horizontal individualism	1,575	8	1	.27	.29	.10	[0.17, 0.42]	[0.19, 0.39]	1.59
Vertical collectivism	1,075	5	5	.44	.47	.24	[0.16, 0.78]	[0.22, 0.72]	
Turnover intentions									
Horizontal individualism	13,583	46	3	-.33	-.40	.09	[-0.52, -0.28]	[-0.44, -0.36]	3.25**
Vertical collectivism	3,028	12	4	-.20	-.25	.15	[-0.44, -0.06]	[-0.35, -0.15]	

Note. *N* = combined sample size; *k* = number of correlations; *k_c* = number of countries; *r* = mean uncorrected correlation; ρ = estimated true score correlation corrected for measurement error; CV = credibility interval; CI = confidence interval; *t* = *t*-test statistic for differences in true correlations between countries with configurations of horizontal individualism and vertical collectivism.

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

collectivistic ($\rho_{VC} = .29$) cultures ($t = .32$, *ns*). Therefore, Hypothesis 1(b) is supported, whereas Hypothesis 1(a) is not.

Regarding justice outcomes, results show that relationships between LMX and distributive justice ($\rho_{HI} = .51$ vs. $\rho_{VC} = .36$; $t = 2.77$, $p < .01$), procedural justice ($\rho_{HI} = .63$ vs. $\rho_{VC} = .50$; $t = 2.58$, $p < .01$), and interactional justice ($\rho_{HI} = .79$ vs. $\rho_{VC} = .62$; $t = 1.72$, $p < .05$) are significantly stronger in horizontal-individualistic compared with vertical-collectivistic countries. Therefore, Hypotheses 1(c), 1(d), and 1(e) are supported.

Finally, for attitudinal outcomes, results show that relationships of LMX with job satisfaction ($\rho_{HI} = .55$ vs. $\rho_{VC} = .45$; $t = 3.09$, $p < .01$) and turnover intentions ($\rho_{HI} = -.40$ vs. $\rho_{VC} = -.25$; $t = 3.25$, $p < .01$) are significantly stronger in horizontal-individualistic than in vertical-collectivistic countries. However, results do not support our hypotheses for organizational commitment. The relationships between LMX and affective ($\rho_{HI} = .48$ vs. $\rho_{VC} = .52$; $t = 1.44$, *ns*) and normative ($\rho_{HI} = .29$ vs. $\rho_{VC} = .47$; $t = 1.59$, *ns*) organizational commitment¹ are not different in horizontal-individualistic and vertical-collectivistic cultures. Therefore, Hypotheses 1(f) and 1(i) are supported, whereas Hypotheses 1(g) and 1(h) are not.

We hypothesized in Hypothesis 2 that members in horizontal-individualistic countries would show a stronger positive association of transformational leadership and leader trust with LMX than members in vertical-collectivistic countries. Results (in Table 2) indicate that the relationship between leader trust and LMX is

stronger in horizontal-individualistic ($\rho_{HI} = .72$) than in vertical-collectivistic ($\rho_{VC} = .52$) countries ($t = 1.74$, $p < .05$). Yet, there is no difference in the relationship strength between transformational leadership and LMX in horizontal-individualistic ($\rho_{HI} = .74$) and vertical-collectivistic ($\rho_{VC} = .69$) countries ($t = .74$, *ns*). Therefore, Hypothesis 2(b) is supported, whereas Hypothesis 2(a) is not.

Test for Extreme Response Style Differences Across Cultural Configurations

Table 3 presents the meta-analytic variances for LMX and its correlates for the two cultural configurations. It also reports the Q_R statistic (Hedges & Olkin, 1985) that tests for differences in variances across the two cultural configurations. As noted, extreme response style differences are present only when variances differ significantly across the two cultural configurations. Table 3 shows that four out of 12 constructs (procedural justice: $\sigma_{HI}^2 = 1.11$ vs. $\sigma_{VC}^2 = 0.75$; $Q_R = 8.40$, $p < .01$; turnover intentions: $\sigma_{HI}^2 = 2.01$ vs. $\sigma_{VC}^2 = 1.48$, $Q_R = 5.94$, $p < .05$; transformational leadership: $\sigma_{HI}^2 = 0.83$ vs. $\sigma_{VC}^2 = 0.45$, $Q_R = 25.36$, $p < .01$; and leader trust:

¹ We also explored relationships between LMX and continuance commitment. However, results show that LMX is unrelated to continuance commitment in both horizontal-individualistic ($k = 6$, $\rho_{HI} = -.02$, *ns*) and vertical-collectivistic ($k = 4$, $\rho_{VC} = .13$, *ns*) cultural configurations.

Table 2

Results of Moderator Analysis of National Culture on Relationships Between Leader–Member Exchange (LMX) and Antecedent Correlates

LMX correlate	<i>N</i>	<i>k</i>	<i>k_c</i>	<i>r</i>	ρ	<i>SD_ρ</i>	80% CV	95% CI	<i>t</i>
Transformational leadership									
Horizontal individualism	4,561	18	3	.65	.74	.19	[0.50, 0.98]	[0.64, 0.84]	0.74
Vertical collectivism	2,247	9	7	.55	.69	.18	[0.46, 0.92]	[0.50, 0.88]	
Leader trust									
Horizontal individualism	4,084	15	2	.55	.72	.27	[0.37, 1.07]	[0.58, 0.85]	1.74*
Vertical collectivism	551	3	2	.42	.52	.15	[0.34, 0.71]	[0.30, 0.75]	

Note. *N* = combined sample size; *k* = number of correlations; *k_c* = number of countries; *r* = mean uncorrected correlation; ρ = estimated true score correlation corrected for measurement error; CV = credibility interval; CI = confidence interval; *t* = *t*-test statistic for differences in true correlations between countries with configurations of horizontal individualism and vertical collectivism.

* $p < .05$.

$\sigma_{HI}^2 = 0.77$ vs. $\sigma_{VC}^2 = 1.50$, $Q_R = 8.78$, $p < .01$) have significantly different variances in horizontal-individualistic than in vertical-collectivistic cultures. Thus, extreme responding appears to affect only procedural justice, turnover intentions, transformational leadership, and leader trust. Table 4 compares relationships between LMX and these constructs in horizontal-individualistic and vertical-collectivistic cultures after correcting for range restrictions in studies from vertical-collectivistic cultures.

Overall, we find that correcting for range restrictions does not alter the pattern of findings regarding the relationship strength between LMX and these correlates across the two cultural configurations. Results show that corrected relationships between LMX and procedural justice ($\rho_{HI} = .63$ vs. $\rho_{VC} = .54$; $t = 1.73$, $p < .05$), turnover intentions ($\rho_{HI} = -.40$ vs. $\rho_{VC} = -.26$; $t = 2.97$, $p < .01$), and leader trust ($\rho_{HI} = .72$ vs. $\rho_{VC} = .25$; $t = 3.89$, $p < .01$) are significantly stronger in horizontal-individualistic than in vertical-collectivistic cultures, whereas this is not the case for transformational leadership ($\rho_{HI} = .72$ vs. $\rho_{VC} = .84$; $t = 1.62$, *ns*). This pattern of results is consistent with our uncorrected findings.

Discussion

Our study examines a long-standing concern that theories developed in one cultural context may not be equally applicable in other cultural contexts (Gelfand et al., 2007). More specifically, we offer timely insights into the boundary conditions of LMX theory by examining the moderating impact of national culture on relationships within the nomological network of LMX.

Seven of the 11 LMX correlates show patterns that are consistent with our arguments. Although members in both cultural configurations are sensitive to how leaders treat them, members' responses in vertical-collectivistic cultures may also be influenced by collective interests and role-based loyalty. The attenuated relationships between LMX and OCB, distributive justice, procedural justice, interactional justice, job satisfaction, turnover intentions, and leader trust suggest that culture matters when considering antecedents and outcomes of LMX. Hence, our findings support Anand et al.'s (2011) assertion that individualism-collectivism and power distance have implications for the development and outcomes of LMX.

However, we also observed three intriguing and counterintuitive findings that corroborate with Hui et al.'s (2004) conclusion that the way in which cultural values affect the leader–member relationship is very complex. First, we found that the relationship

between LMX and task performance was not different in horizontal-individualistic and vertical-collectivistic cultures. This finding suggests that members in both cultural configurations appear to require the necessary work-related information and resources afforded by higher quality LMX to perform well.

Second, the relationships between LMX and affective and normative commitment were not different in horizontal-individualistic and vertical-collectivistic cultures. One explanation for these findings is that followers from both horizontal-individualistic and vertical-collectivistic cultures perceive their leaders to be acting as agents of their organizations, and thus the emotional attachment and sense of obligation to the organization reflected in affective and normative commitment respectively appear to be inspired by the quality of the relationship with the leader in both cultural settings. A recent study by Eisenberger et al. (2010) supports this argument. They designed a study that tested relationships between LMX and organizational commitment in both horizontal-individualistic (United States) and vertical-collectivistic (Portugal) cultures. Eisenberger et al. observed that in both cultures, "employees generalize their exchange relationship from their supervisor to the organization because they view the supervisor as representing the organization" (p. 1086). Hence, regardless of whether the members were from a horizontal-individualistic or vertical-collectivistic culture, any assessment made by members of the quality of relationship with the leader would be likely to have similar halo or spillover effects on their attitudes toward the organization (i.e., organizational commitment).

Finally, the relationship between transformational leadership and LMX was not different in horizontal-individualistic and vertical-collectivistic cultures. We had argued that in general, members in vertical-collectivistic societies evaluate relationships with their leaders based on both how the relationship meets their personal needs and formal roles. Yet, this distinction may not be important in relation to transformational leadership given that the cultural profiles did not display differential effects linking this type of leadership with LMX. Perhaps because of their charismatic appeal and ability to inspire and motivate followers (Judge & Piccolo, 2004), transformational leaders are more effective than purely transactional leaders across cultures in getting members to value them at a personal level as reflected in LMX. That is, our results suggest that instead of seeing leaders merely as formal authorities carrying out their duties, as we predicted for followers

Table 3
Results of Moderator Analysis of National Culture on Construct Variances

Variable	N	k	Variance			
			σ^2	SE σ^2	95% CI	Q_R
Leader-member exchange						
Horizontal individualism	47,131	193	0.83	0.02	[0.79, 0.87]	
Vertical collectivism	15,703	58	0.79	0.04	[0.72, 0.86]	.88
Outcome correlates						
Task performance						
Horizontal individualism	19,997	86	0.76	0.03	[0.70, 0.83]	
Vertical collectivism	2,577	12	0.63	0.08	[0.47, 0.80]	1.98
Organizational citizenship behavior						
Horizontal individualism	11,356	58	0.75	0.04	[0.68, 0.82]	
Vertical collectivism	5,179	21	0.76	0.06	[0.64, 0.87]	.00
Distributive justice						
Horizontal individualism	4,885	22	1.26	0.09	[1.08, 1.44]	
Vertical collectivism	2,351	12	1.17	0.12	[0.93, 1.41]	.36
Procedural justice						
Horizontal individualism	4,651	21	1.11	0.08	[0.96, 1.27]	
Vertical collectivism	2,793	12	0.75	0.10	[0.56, 0.94]	8.40**
Interactional justice						
Horizontal individualism	3,745	14	1.07	0.11	[0.86, 1.29]	
Vertical collectivism	1,266	5	1.10	0.16	[0.79, 1.42]	.02
Job satisfaction						
Horizontal individualism	15,135	64	0.85	0.04	[0.77, 0.93]	
Vertical collectivism	4,371	18	0.80	0.08	[0.64, 0.96]	.46
Affective commitment						
Horizontal individualism	15,392	61	0.90	0.04	[0.81, 0.98]	
Vertical collectivism	6,522	21	0.82	0.07	[0.69, 0.96]	.79
Normative commitment						
Horizontal individualism	1,412	7	1.14	0.14	[0.87, 1.42]	
Vertical collectivism	1,075	5	0.85	0.16	[0.54, 1.16]	1.92
Turnover intentions						
Horizontal individualism	12,767	42	2.01	0.10	[1.82, 2.20]	
Vertical collectivism	2,607	10	1.48	0.19	[1.11, 1.86]	5.94*
Antecedent correlates						
Transformational leadership						
Horizontal individualism	4,561	18	0.83	0.04	[0.74, 0.92]	
Vertical collectivism	2,247	9	0.45	0.06	[0.34, 0.57]	25.36**
Leader trust						
Horizontal individualism	4,084	15	0.77	0.09	[0.58, 0.95]	
Vertical collectivism	551	3	1.50	0.23	[1.05, 1.95]	8.78**

Note. N = combined sample size; k = number of variances; σ^2 = estimated true variance; CI = confidence interval; Q_R = Q statistic (Hedges & Olkin, 1985) for quantitative (regression) model with variance as dependent variable and national culture (0 = horizontal individualism; 1 = vertical collectivism) as independent variable.

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

in vertical-collectivistic nations, transformational leaders may bring forth an aspiration on the part of followers to exert efforts to form high-quality relationships. Research from the Global Leadership and Organizational Behavior Effectiveness (GLOBE) project supports this argument by suggesting that members from all cultures value transformational leaders (Javidan, Dorfman, de Luque, & House, 2006). If that is the case, then transformational leaders in vertical-collectivistic societies may inspire personal liking through emphasizing the common fate of the leader and followers so that formal roles and associated obligations become less important. Thus, these leaders affect LMX quality as strongly as leaders in horizontal-individualistic societies.

Taken together, our results provide important empirical evidence that sheds some light on the cultural assumptions, and hence cultural boundaries, of LMX. At the same time, the present study

suggests that culture's impact on LMX is more complex than previously assumed and warrants deeper consideration by organizational scholars. In particular, our discussion of unexpected findings above highlights the need to better understand how culture affects the mediating processes linking LMX to its various antecedent and outcome correlates.

Theoretical Implications and Future Research Directions

Findings of this study have several implications for future research on LMX in a global work environment. First, our current findings demonstrate that cultural configurations of horizontal individualism and vertical collectivism moderate relationships within the nomological network of LMX. Future research should

Table 4

Results of Moderator Analysis of National Culture on Relationships Between Leader–Member Exchange (LMX) and Correlates With Range Restriction Correction

LMX correlate	<i>N</i>	<i>k</i>	<i>k_c</i>	<i>r</i>	ρ	<i>SD_ρ</i>	<i>t</i>
Procedural justice							
Horizontal individualism	4,651	21	2	.55	.63	.19	
Vertical collectivism	2,793	12	7	.42	.54	.11	1.73*
Turnover intentions							
Horizontal individualism	13,583	46	3	−.33	−.40	.09	
Vertical collectivism	3,028	12	4	−.20	−.26	.15	2.97**
Transformational leadership							
Horizontal individualism	4,561	18	3	.65	.72	.17	
Vertical collectivism	2,247	9	7	.55	.84	.18	1.62
Leader trust							
Horizontal individualism	4,084	15	2	.55	.72	.27	
Vertical collectivism	551	3	2	.42	.25	.17	3.89**

Note. *N* = combined sample size; *k* = number of correlations; *k_c* = number of countries; *r* = mean uncorrected correlation; ρ = estimated true score correlation corrected for measurement error and range restriction; *t* = *t*-test statistic for differences in true correlations between countries with configurations of horizontal individualism and vertical collectivism.

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

therefore include subordinates' cultural values of horizontal individualism and vertical collectivism in the design to see whether effects at the individual level are similar to what we found at the national level.

Second, our current findings on moderating effects involving national culture highlight the possible cultural boundaries of exchange processes between leaders and subordinates. Echoing recent recommendations by Shore, Coyle-Shapiro, Chen, and Tetrick (2009) for research to examine content and processes of social exchanges across cultures, we urge future studies to compare LMX cross-culturally, in terms of content. For instance, future research could examine the degree to which LMX involve primarily work or nonwork exchanges of social and economic benefits. Law et al. (2000) suggested that whereas in the United States LMX are primarily work related, in China they involve mainly nonwork exchanges of social and economic benefits. Our pattern of results along with suggestions by these researchers suggests a need for more nuanced approaches to understanding the influence of culture on LMX.

Third, future research could assess the reciprocity process (e.g., Uhl-Bien & Maslyn, 2003; J. B. Wu et al., 2006) across cultures to better understand the underlying mechanisms by which culture affects LMX. Drawing on Sahlins's (1972) reciprocity typology, J. B. Wu et al. (2006) distinguished balanced reciprocity and generalized reciprocity. The focus on mutual benefit in balanced reciprocity suggests that this reciprocity process may be more prevalent in individualistic cultures where people emphasize the pursuit of mutual interest of both parties to the exchange. The focus on other-interest in generalized reciprocity, where there is beneficial treatment provided with no expectation of a return, suggests that this reciprocity process may be more prevalent in collectivistic cultures where people emphasize the pursuit of collective interests. Having a more in-depth understanding of the underlying mechanisms of exchange can in turn offer more precise insights on how to assist leaders in developing constructive exchange relationships with culturally diverse subordinates, thus ensuring their effectiveness.

Strengths and Limitations

A methodological strength of our study is our examination of response style differences and associated range restrictions across cultures. Range restrictions across cultures can be due to methodological artifacts such as less extreme responding (Harzing, 2006; T. Johnson et al., 2005) or to substantial cultural differences such as tightness–looseness norms that reduce variability in behavior (Gelfand, Nishii, & Raver, 2006; Gelfand et al., 2011). We suggested procedures that allow meta-analysts to detect range restrictions across cultures or moderator categories in general. By applying appropriate correction procedures, our study offers a unique opportunity to examine the degree to which range restrictions account for observed differences in the relationship strengths across cultures. Hence, this article provides a methodological improvement over previous meta-analyses that have not considered range restriction as an alternative explanation when comparing relationships across cultures.

One limitation of our study is that we included a smaller set of LMX correlates than prior meta-analyses. This was due to the relatively small number of cross-cultural, non-U.S., studies available. Thus, future research should continue to examine other LMX correlates cross-culturally. Another limitation to our meta-analysis is an inability to examine construct equivalence for the variables in our study across the two cultures. According to van de Vijver and Leung (1997), meaningful cross-cultural comparisons require support for construct equivalence across cultures. Common empirical approaches to testing construct equivalence (e.g., Vandenberg & Lance, 2000) require estimates of the covariances between items. Unfortunately, this information is usually not available in primary studies. As a consequence, change in construct meaning across cultures is an alternative explanation for our findings. Future research should ascertain whether our findings can be replicated in carefully controlled designs that ensure construct equivalence.

Practical Implications

For leaders operating in a global context, our findings have valuable implications for when establishing personal relationships

with members is particularly important to achieve positive outcomes for their organizations. Consistent with previous LMX research, our results suggest that establishing high-quality LMX relationships leads to many positive outcomes in horizontal-individualistic cultures (Gerstner & Day, 1997; Ilies et al., 1997). By contrast, leaders in vertical-collectivistic cultures may be less able to achieve these outcomes through LMX and may be better served by also relying on role-based loyalty (Jiang & Cheng, 2008) and deference (Wasti & Can, 2008) from subordinates.

Our findings therefore underscore the importance for global leaders to adapt their approaches to building relationships with multicultural subordinates in order to be effective. Leaders from horizontal-individualistic cultures may not always need to put as much emphasis on developing personalized exchange relationships when interacting with vertical-collectivistic subordinates. Rather, they can also draw on their role-based authority. Leaders from vertical-collectivistic cultures on the other hand should be aware that they may need to make a greater effort to develop personalized exchange relationships when interacting with horizontal-individualistic subordinates instead of relying primarily on their role-based authority.

As a result, careful selection, grooming, and development of leaders who can operate effectively in our globalized environment is a pressing need for contemporary organizations (Avolio, Walumbwa, & Weber, 2009). Notably, the competencies that make leaders effective in domestic settings may differ for leaders in cross-border settings (Rockstuhl, Seiler, Ang, Van Dyne, & Annen, 2011). Avolio et al. (2009) suggested that leaders with high cultural intelligence (CQ)—the capability to function and manage effectively in culturally diverse settings (Ang et al., 2007; Earley & Ang, 2003)—are better able to manage culturally diverse expectations of their followers. Thus, when leaders work extensively in international or cross-border settings, organizations should emphasize development of cross-cultural capabilities, such as CQ.

Conclusion

We meta-analyzed relationships between LMX and commonly studied correlates to examine the role of national culture in LMX research. Results based on 282 independent samples ($N = 68,587$) from 23 countries indicate that national culture moderates relationships between LMX and commonly studied correlates. Specifically, relationships of LMX with OCB, justice perceptions, job satisfaction, turnover intentions, and leader trust are stronger in horizontal-individualistic than in vertical-collectivistic cultures even after controlling for response style differences. These findings support our hypothesis that although members in both cultures are sensitive to how leaders treat them, members' responses in vertical-collectivistic cultures are also more likely to be influenced by collective interests and role-based loyalty. Yet, results also show that national culture does not influence relationships of LMX with task performance, organizational commitment, and transformational leadership. Taken together, our results provide timely insights to the cultural assumptions of LMX theory and suggest the criticality of further research exploring the role of culture on leader-member relations.

References

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

- Aguinis, H., Sturman, M. C., & Pierce, C. A. (2008). Comparison of three meta-analytic procedures for estimating moderating effects of categorical variables. *Organizational Research Methods*, 11, 9–34. doi:10.1177/1094428106292896
- Anand, S., Hu, J., Liden, R. C., & Vidyarthi, P. R. (2011). Leader-member exchange: Recent research findings and prospects for the future. In A. Bryman, D. Collinson, K. Grint, B. Jackson, & M. Uhl-Bien (Eds.), *Sage handbook of leadership* (pp. 311–325). Thousand Oaks, CA: Sage.
- *Anand, S., Vidyarthi, P. R., Liden, R. C., & Rousseau, D. M. (2010). Good citizens in poor-quality relationships: Idiosyncratic deals as a substitute for relationship quality. *Academy of Management Journal*, 53, 970–988. doi:10.5465/AMJ.2010.54533176
- *Anderson, S. E., & Williams, L. J. (1996). Interpersonal, job, and individual factors related to helping processes at work. *Journal of Applied Psychology*, 81, 282–296. doi:10.1037/0021-9010.81.3.282
- *Andrews, M. C., & Kacmar, K. M. (2001). Discrimination among organizational politics, justice, and support. *Journal of Organizational Behavior*, 22, 347–366. doi:10.1002/job.92
- Ang, S., Van Dyne, L., Koh, C., Ng, K. Y., Templer, K. J., Tay, C., & Chandrasekar, N. A. (2007). Cultural intelligence: Its measurement and effects on cultural judgment and decision making, cultural adaptation, and task performance. *Management and Organization Review*, 3, 335–371. doi:10.1111/j.1740-8784.2007.00082.x
- *Aryee, S., & Chen, Z. X. (2006). Leader-member exchange in a Chinese context: Antecedents, the mediating role of psychological empowerment and outcomes. *Journal of Business Research*, 59, 793–801. doi:10.1016/j.jbusres.2005.03.003
- Avolio, B. J., Walumbwa, F. O., & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. *Annual Review of Psychology*, 60, 421–449. doi:10.1146/annurev.psych.60.110707.163621
- *Ballinger, G. A., Lehman, D. W., & Schoorman, F. D. (2010). Leader-member exchange and turnover before and after succession events. *Organizational Behavior and Human Decision Processes*, 113, 25–36. doi:10.1016/j.obhdp.2010.04.003
- *Barbuto, J. E. J., & Wheeler, D. W. (2006). Scale development and construct clarification of servant leadership. *Group & Organization Management*, 31, 300–326. doi:10.1177/1059601106287091
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York, NY: Free Press.
- *Basu, R. (1991). An empirical examination of leader-member exchange and transformational leadership as predictors of innovative behavior (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 9201299)
- *Basu, R., & Green, S. G. (1995). Subordinate performance, leader-subordinate compatibility, and exchange quality in leader-member dyads: A field study. *Journal of Applied Social Psychology*, 25, 77–92. doi:10.1111/j.1559-1816.1995.tb01585.x
- *Bauer, T. N., Erdogan, B., Liden, R. C., & Wayne, S. J. (2006). A longitudinal study of the moderating role of extraversion: LMX, performance, and turnover during new executive development. *Journal of Applied Psychology*, 91, 298–310. doi:10.1037/0021-9010.91.2.298
- *Bauer, T. N., & Green, S. G. (1996). Development of leader-member exchange: A longitudinal test. *Academy of Management Journal*, 39, 1538–1567. doi:10.2307/257068
- *Bernerth, J. B. (2005). *Putting exchange back into leader-member exchange (LMX): An empirical assessment of a social exchange (LMSX) scale and an investigation of personality as an antecedent* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3201432)

- *Bettencourt, L. A. (2004). Change-oriented organizational citizenship behaviors: The direct and moderating influence of goal orientation. *Journal of Retailing*, 80, 165–180. doi:10.1016/j.jretai.2003.12.001
- *Bhal, K. T. (2006). LMX–citizenship behavior relationship: Justice as a mediator. *Leadership & Organization Development Journal*, 27, 106–117. doi:10.1108/01437730610646615
- *Bhal, K. T., & Ansari, M. A. (2007). Leader–member exchange–subordinate outcomes relationship: Role of voice and justice. *Leadership & Organization Development Journal*, 28, 20–35. doi:10.1108/01437730710718227
- *Bhal, K. T., Gulati, N., & Ansari, M. A. (2009). Leader–member exchange and subordinate outcomes: Test of a mediation model. *Leadership & Organization Development Journal*, 30, 106–125. doi:10.1108/01437730910935729
- *Blau, G. (1988). An investigation of the apprenticeship organizational socialization strategy. *Journal of Vocational Behavior*, 32, 176–195. doi:10.1016/0001-8791(88)90013-9
- Blau, P. M. (1964). *Exchange and power in social life*. New York, NY: Wiley.
- *Botero, I. C. (2005). *Getting one's way vs. maintaining the relationship: Effects of leader–member exchange (LMX) quality on upward influence message production across two cultures* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3171442)
- *Boulanger, D. (2008). *Leader–member exchange and trust: How a team building exercise improves leader–member relations* (Master's thesis). Available from ProQuest Dissertations and Theses database. (UMI No. 1455841)
- *Bowman, M. D. (2010). *A test of direct and partially mediated relationships between leader member exchange, job embeddedness, turnover intentions, and job search behaviors in a southern police department* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3371500)
- *Brandes, P., Dharwadkar, R., & Wheatley, K. (2004). Social exchanges within organizations and work outcomes: The importance of local and global relationships. *Group & Organization Management*, 29, 276–301. doi:10.1177/1059601103257405
- *Brouer, R. L. (2007). *The role of political skill in the leadership process–work outcomes relationships* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3282577)
- Brower, H. H., Schoorman, F. D., & Tan, H. H. (2000). A model of relational leadership: The integration of trust and leader–member exchange. *Leadership Quarterly*, 11, 227–250. doi:10.1016/S1048-9843(00)00040-0
- *Brunetto, Y., Farr-Wharton, R., & Shacklock, K. (2010). The impact of supervisor–subordinate relationships on morale: Implications for public and private sector nurses' commitment. *Human Resource Management Journal*, 20, 206–225. doi:10.1111/j.1748-8583.2009.00117.x
- *Butler, A. M. (2010). *Why they stay: Factors that influence information technology employees' retention during mergers, acquisitions, and divestitures* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3408904)
- *Carter, G. (2010). *The relationships among social exchange, organizational citizenship, and employee behavior* (Master's thesis). Available from ProQuest Dissertations and Theses database. (UMI No. 1479415)
- *Castleberry, S. B., & Tanner, J. F. (1989). Salesperson's commitment to the organization: Associations with performance, motivation, conflict, satisfaction, and relationship with the manager. *Journal of Applied Business Research*, 5, 84–89.
- *Chan, L. R. (2004). *The effects of ethnic diversity on LMX, job satisfaction, and organizational commitment* (Master's thesis). Available from ProQuest Dissertations and Theses database. (UMI No. 1423156)
- *Chang, C. (2005). *Investigating leader–member exchange and team–member exchange as moderators of the relationship between transformational leadership practices and team effectiveness* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3191366)
- Chen, M., & Miller, D. (2011). The relational perspective as a business mindset: Managerial implications for East and West. *Academy of Management Perspectives*, 25(3), 6–18. doi:10.5465/AMP.2011.63886526
- *Chen, Y., Friedman, R., Yu, E., Fang, W., & Lu, X. (2009). Supervisor–subordinate guanxi: Developing a three-dimensional model and scale. *Management and Organization Review*, 5, 375–399. doi:10.1111/j.1740-8784.2009.00153.x
- *Chen, Z., Lam, W., & Zhong, J. A. (2007). Leader–member exchange and member performance: A new look at individual-level negative feedback-seeking behavior and team-level empowerment climate. *Journal of Applied Psychology*, 92, 202–212. doi:10.1037/0021-9010.92.1.202
- *Chen, Z. X., Tsui, A. S., & Zhong, L. (2008). Reactions to psychological contract breach: A dual perspective. *Journal of Organizational Behavior*, 29, 527–548. doi:10.1002/job.481
- Cheung, G. W., & Rensvold, R. B. (2000). Assessing extreme and acquiescence response sets in cross-cultural research using structural equations modeling. *Journal of Cross-Cultural Psychology*, 31, 187–212. doi:10.1177/0022022100031002003
- *Chi, S., & Lo, H. (2003). Taiwanese employees' justice perceptions of co-workers' punitive events. *Journal of Social Psychology*, 143, 27–42. doi:10.1080/00224540309598429
- *Chuang, A., & Shen, C. T. (2008, August). *Leader–member relationship: The mediation and moderation effects of person–environment fit in a Chinese culture*. Paper presented at the annual meeting of the Academy of Management, Anaheim, CA.
- *Clemens, E. V., Milsom, A., & Cashwell, C. S. (2009). Using leader–member exchange theory to examine principal–school counselor relationships, school counselors' roles, job satisfaction, and turnover intentions. *Professional School Counseling*, 13, 75–85. doi:10.5330/PSC.n.2010-13.75
- *Cogliser, C. C., Schriesheim, C. A., Scandura, T. A., & Gardner, W. L. (2009). Balance in leader and follower perceptions of leader–member exchange: Relationships with performance and work attitudes. *Leadership Quarterly*, 20, 452–465. doi:10.1016/j.leaqua.2009.03.010
- *Collins, M. D., & George, R. T. (2010). Examination of the relationships among leader–member exchange, job satisfaction, and turnover intent in a limited-service restaurant environment. In *Proceedings of the annual meeting of the Southern Management Association* (pp. 146–151). Retrieved from <http://southernmanagement.org/meetings/2010/proceedings/PaperID158.pdf>
- *Connell, P. W. (2005). *Transformational leadership, leader–member exchange (LMX), and OCB: The role of motives* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3197920)
- *DeConinck, J. B. (2009). The effect of leader–member exchange on turnover among retail buyers. *Journal of Business Research*, 62, 1081–1086. doi:10.1016/j.jbusres.2008.09.011
- *DeConinck, J. B. (2011). The effects of leader–member exchange and organizational identification on performance and turnover among salespeople. *Journal of Personal Selling & Sales Management*, 31, 21–34. doi:10.2753/PSS0885-3134310102
- *Deluga, R. J. (1992). The relationship of leader–member exchange with laissez-faire, transactional, and transformational leadership in naval environments. In K. E. Clark, M. B. Clark, & D. P. Campbell (Eds.), *Impact of leadership* (pp. 237–247). Greensboro, NC: Center for Creative Leadership.
- *Deluga, R. J. (1998). Leader–member exchange quality and effectiveness ratings: The role of subordinate–supervisor conscientiousness similarity. *Group & Organization Management*, 23, 189–216. doi:10.1177/1059601198232006

- *Deluga, R. J., & Perry, J. T. (1994). The role of subordinate performance and ingratiation in leader-member exchanges. *Group & Organization Management*, 19, 67–86. doi:10.1177/1059601194191004
- *DelVecchio, S. K. (1998). The quality of salesperson-manager relationship: The effect of latitude, loyalty, and competence. *Journal of Personal Selling & Sales Management*, 18, 31–47.
- Dickson, M. W., Den Hartog, D. N., & Mitchelson, J. K. (2003). Research on leadership in a cross-cultural context: Making progress, and raising new questions. *Leadership Quarterly*, 14, 729–768. doi:10.1016/j.leaqua.2003.09.002
- 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.
- *Dolden, S. A. (2001). *An examination of the moderating role of perceived support for innovation on leader-member exchange, team-member exchange, and individual-level work outcomes* (Master's thesis). Available from ProQuest Dissertations and Theses database. (UMI No. 1406127)
- Dorfman, P. W., & Howell, J. P. (1988). Dimensions of national culture and effective leadership patterns: Hofstede revisited. In J. L. C. Cheng, & R. B. Peterson (Eds.), *Advances in international comparative management* (Vol. 3, pp. 127–150). Stamford, CT: JAI Press.
- *Duarte, N. T., Goodson, J. R., & Klich, N. R. (1993). How do I like thee? Let me appraise the ways. *Journal of Organizational Behavior*, 14, 239–249. doi:10.1002/job.4030140304
- *Duarte, N. T., Goodson, J. R., & Klich, N. R. (1994). Effects of dyadic quality and duration on performance appraisal. *Academy of Management Journal*, 37, 499–521. doi:10.2307/256698
- Dulebohn, J. H., Bommer, W. H., Liden, R. C., Brouer, R. L., & Ferris, G. R. (2011). A meta-analysis of antecedents and consequences of leader-member exchange: Integrating the past with an eye toward the future. *Journal of Management*. Advance online publication. doi:10.1177/0149206311415280
- *Dunegan, K. J. (2003). Leader-image compatibility: An image theory view of leadership. *Journal of Business and Management*, 9, 61–78.
- *Dunegan, K. J., Duchon, D., & Uhl-Bien, M. (1992). Examining the link between leader member exchange and subordinate performance: The role of task analyzability and variety as moderators. *Journal of Management*, 18, 59–76. doi:10.1177/014920639201800105
- *Dunegan, K. J., Uhl-Bien, M., & Duchon, D. (2002). LMX and subordinate performance: The moderating effects of task characteristics. *Journal of Business and Psychology*, 17, 275–285. doi:10.1023/A:1019641700724
- Earley, P. C., & Ang, S. (2003). *Cultural intelligence: Individual interactions across cultures*. Palo Alto, CA: Stanford University Press.
- *Eisenberger, R., Karagonlar, G., Stinglhamer, F., Neves, P., Becker, T. E., Gonzales-Morales, M. G., & Steiger-Mueller, M. (2010). Leader-member exchange and affective organizational commitment: The contribution of supervisor's organizational embodiment. *Journal of Applied Psychology*, 95, 1085–1103. doi:10.1037/a0020858
- *Elicker, J. D., Levy, P. E., & Hall, R. J. (2006). The role of leader-member exchange in the performance appraisal process. *Journal of Management*, 32, 531–551. doi:10.1177/0149206306286622
- *Epitropaki, O., & Martin, R. (1999). The impact of relational demography on the quality of leader-member exchanges and employees' work attitudes and well-being. *Journal of Occupational and Organizational Psychology*, 72, 237–240. doi:10.1348/096317999166635
- *Epitropaki, O., & Martin, R. (2005). From ideal to real: A longitudinal study of the role of implicit leadership theories on leader-member exchanges and employee outcomes. *Journal of Applied Psychology*, 90, 659–676. doi:10.1037/0021-9010.90.4.659
- *Erdogan, B. (2002). *Leader-member exchange differentiation fairness: Evidence for a new construct* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3058101)
- *Erdogan, B., & Bauer, T. N. (2010). Differentiated leader-member exchanges: The buffering role of justice climate. *Journal of Applied Psychology*, 95, 1104–1120. doi:10.1037/a0020578
- *Erdogan, B., & Enders, J. (2007). Support from the top: Supervisors' perceived organizational support as a moderator of leader-member exchange to satisfaction and performance relationships. *Journal of Applied Psychology*, 92, 321–330. doi:10.1037/0021-9010.92.2.321
- *Erdogan, B., Kraimer, M. L., & Liden, R. C. (2004). Work value congruence and intrinsic career success: The compensatory roles of leader-member exchange and perceived organizational support. *Personnel Psychology*, 57, 305–332. doi:10.1111/j.1744-6570.2004.tb02493.x
- Erdogan, B., & Liden, R. C. (2002). Social exchanges in the workplace: A review of recent developments and future research directions in leader-member-exchange theory. In L. L. Neider, & C. A. Schriesheim (Eds.), *Leadership* (pp. 65–114). Greenwich, CT: Information Age.
- *Erdogan, B., & Liden, R. C. (2006). Collectivism as a moderator of responses to organizational justice: Implications for leader-member exchange and ingratiation. *Journal of Organizational Behavior*, 27, 1–17. doi:10.1002/job.365
- *Erdogan, B., Liden, R. C., & Kraimer, M. L. (2006). Justice and leader-member exchange: The moderating role of organizational culture. *Academy of Management Journal*, 49, 395–406. doi:10.5465/AMJ.2006.20786086
- *Erwing, J., & Lee, L. (2009, November). *Leader-member exchange and transformational leadership communication behaviors*. Paper presented at annual meeting of the National Communication Association, Chicago, IL.
- Farh, J.-L., Hackett, R. D., & Liang, J. (2007). Individual-level cultural values as moderators of perceived organizational support-employee outcome relationships in China: Comparing the effects of power distance and traditionality. *Academy of Management Journal*, 50, 715–729. doi:10.5465/AMJ.2007.25530866
- *Fernandez, C. F., & Vecchio, R. P. (1997). Situational leadership theory revisited: A test of an across-jobs perspectives. *Leadership Quarterly*, 8, 67–84. doi:10.1016/S1048-9843(97)90031-X
- Fiss, P. C. (2007). A set-theoretic approach to organizational configurations. *Academy of Management Review*, 32, 1180–1198. doi:10.5465/AMR.2007.26586092
- *Foosiri, P. (2002). *An empirical study of organizational commitment and antecedents of Thai employees within the American Chamber of Commerce in Thailand* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3069475)
- *Francis, M. E. (2010). *The ties that bind: Examining the effects of social exchange variables on turnover intentions among executives* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3442083)
- *Gaa, S. M. (2010). *An exploratory analysis of the relationships between leadership, safety climate, and organizational citizenship behavior within high-containment biosafety laboratories* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3412440)
- *Gandolfo, C. J. (2006). *The role of leader member exchange theory and multi-rater feedback on evaluating the performance appraisal process* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3215013)
- Gelfand, M. J., Erez, M., & Aycan, Z. (2007). Cross-cultural organizational behavior. *Annual Review of Psychology*, 58, 479–514. doi:10.1146/annurev.psych.58.110405.085559
- Gelfand, M. J., Nishii, L. H., & Raver, J. L. (2006). On the nature and importance of cultural tightness-looseness. *Journal of Applied Psychology*, 91, 1225–1244. doi:10.1037/0021-9010.91.6.1225
- Gelfand, M. J., Raver, J. L., Nishii, L. H., Leslie, L. M., Lun, J., Lim, B. C., . . . Yamaguchi, S. (2011, May 27). Differences between tight and loose

- cultures: A 33-nation study. *Science*, 332, 1100–1104. doi:10.1126/science.1197754
- 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. doi:10.1037/0021-9010.82.6.827
- *Ghosh, R. (2009). *Predicting intent to turnover: Reciprocal learning in mentoring relationships, organizational citizenship behavior, and mediating mechanisms* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3381912)
- *Glibkowski, B. C. (2009). *Negotiating social exchanges: The mediating role of integrative negotiation in social exchanges* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3394217)
- *Goertzen, B. J. (2003). *Role of managers' and direct reports' ethic of virtue on leader-member exchanges* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3102566)
- *Golden, T. D. (2006). The role of relationships in understanding telecommuter satisfaction. *Journal of Organizational Behavior*, 27, 319–340. doi:10.1002/job.369
- *Gómez, C., & Rosen, B. (2001). The leader-member exchange as a link between managerial trust and employee empowerment. *Group & Organization Management*, 26, 53–69. doi:10.1177/1059601101261004
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25, 161–178. doi:10.2307/2092623
- *Graen, G., Dansereau, F., Jr., Minami, T., & Cashman, J. (1973). Leadership behaviors as cues to performance evaluation. *Academy of Management Journal*, 16, 611–623. doi:10.2307/254694
- Graen, G., & Scandura, T. A. (1987). Toward a psychology of dyadic organizing. *Research in Organizational Behavior*, 9, 175–208.
- Graen, G., & 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. doi:10.1016/1048-9843(95)90036-5
- *Green, S. G., Anderson, S. E., & Shivers, S. L. (1996). Demographic and organizational influences on leader-member exchange and related work attitudes. *Organizational Behavior and Human Decision Processes*, 66, 203–214. doi:10.1006/obhd.1996.0049
- *Green, S. G., Blank, W., & Liden, R. C. (1983). Market and organizational influences on bank employees' work attitudes and behaviors. *Journal of Applied Psychology*, 68, 298–306. doi:10.1037/0021-9010.68.2.298
- *Greenwood, D. M. (2000). *Is anybody listening? Individual differences in reactions to performance feedback* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 9949092)
- *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. doi:10.1348/096317905X53859
- *Grosvenor, S. (2005). *Developmental antecedents of leader-follower relationships and trust* (Master's thesis). Available from ProQuest Dissertations and Theses database. (UMI No. MR10326)
- *Gupta, V., & Krishnan, V. R. (2004). Impact of socialization on transformational leadership: Role of leader member exchange. *South Asian Journal of Management*, 11(3), 7–20.
- *Gutknecht, S. P. (2004, October). *The role of leader-member exchange during organizational changes*. Paper presented at the annual conference of the International Military Testing Association, Brussels, Belgium.
- *Hansen, S. D. (2010). *When and how does ethical leadership impact important organizational outcomes? A multi-foci social exchange model* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3444559)
- *Harris, K. J. (2004). What you don't know can't hurt you: The interactive relationship between leader-member exchange and perceptions of politics on job satisfaction. *Journal of Behavioral and Applied Management*, 5, 188–203.
- *Harris, K. J., Harris, R. B., & Eplion, D. M. (2007). Personality, leader-member exchanges, and work outcomes. *Journal of Behavioral and Applied Management*, 8, 92–107.
- *Harris, K. J., & Kacmar, K. M. (2005). Erasing the strain: The buffer role of supervisors in the perceptions of politics-strain relationship. *Journal of Occupational and Organizational Psychology*, 78, 337–354. doi:10.1348/096317905X26110
- *Harris, K. J., & Kacmar, K. M. (2006). Too much of a good thing: The curvilinear effect of leader-member exchange on stress. *Journal of Social Psychology*, 146, 65–84. doi:10.3200/SOCP.146.1.65-84
- *Harris, K. J., Kacmar, K. M., & Witt, L. A. (2005). An examination of the curvilinear relationship between leader-member exchange and intent to turnover. *Journal of Organizational Behavior*, 26, 363–378. doi:10.1002/job.314
- *Harris, K. J., Wheeler, A. R., & Kacmar, K. M. (2009). Leader-member exchange and empowerment: Direct and interactive effects on job satisfaction, turnover intentions, and performance. *Leadership Quarterly*, 20, 371–382. doi:10.1016/j.leaqua.2009.03.006
- Harzing, A.-W. (2006). Response styles in cross-national survey research: A 26-country study. *International Journal of Cross-Cultural Management*, 6, 243–266. doi:10.1177/1470595806066332
- *Heck, A. K., Bedeian, A. G., & Day, D. V. (2005). Mountains out of molehills? Tests of the mediating effects of self-esteem in predicting workplace complaining. *Journal of Applied Social Psychology*, 35, 2262–2289. doi:10.1111/j.1559-1816.2005.tb02102.x
- Hedges, L. V., & Olkin, I. (1985). *Statistical methods for meta-analysis*. Orlando, FL: Academic Press.
- *Henderson, D. J. (2009). *A communication perspective on leader-member exchange and turnover and promotion* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3364603)
- *Henderson, D. J., Wayne, S. J., Shore, L. M., Bommer, W. H., & Tetrick, L. E. (2008). Leader-member exchange, differentiation, and psychological contract fulfillment: A multilevel examination. *Journal of Applied Psychology*, 93, 1208–1219. doi:10.1037/a0012678
- *Hepperlen, T. M. (2002). *Leader-member exchange (LMX) or fulfillment? The role of basic psychological needs in LMX relationships* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3074080)
- *Hochwarter, W. A. (2003). The interactive effects of pro-political behavior and politics perceptions on job satisfaction and affective commitment. *Journal of Applied Social Psychology*, 33, 1360–1378. doi:10.1111/j.1559-1816.2003.tb01953.x
- *Hofmann, D. A., Gerras, S. J., & Morgeson, F. P. (2003). Climate as a moderator of the relationship between leader-member exchange and content specific citizenship: Safety climate as an exemplar. *Journal of Applied Psychology*, 88, 170–178. doi:10.1037/0021-9010.88.1.170
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2nd ed.). London, England: Sage.
- *Holcomb, D. D. (2009). *An extension of leader-member exchange (LMX) beyond the member to direct manager dyad and their correlations to the member's organizational commitment* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3368333)
- *Hoover, E. R. (2009). *How personality and self-identity impact the effects of leader member exchange on role stressors and organizational outcomes* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3394160)
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Palo Alto, CA: Sage.
- *Howell, J. M., & Hall-Merenda, K. E. (1999). The ties that bind: The impact of leader-member exchange, transformational and transactional

- leadership, and distance on predicting follower performance. *Journal of Applied Psychology*, 84, 680–694. doi:10.1037/0021-9010.84.5.680
- *Hrivnak, G. A., Jr. (2009). *Extending a model of leader-member exchange development: Individual and dyadic effects of personality, similarity and liking* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3349808)
- *Hsiung, H., & Tsai, W. (2009). Job definition discrepancy between supervisors and subordinates: The antecedent role of LMX and outcomes. *Journal of Occupational and Organizational Psychology*, 82, 89–112. doi:10.1348/096317908X292374
- *Hu, J., Vidyarthi, P. R., Anand, S., & Liden, R. C. (2010). Examining a social exchange model of developmental idiosyncratic deals and employee organizational citizenship behavior. In *Proceedings of the annual meeting of the Southern Management Association* (pp. 403–408). Retrieved from <http://southernmanagement.org/meetings/2010/proceedings/PaperID223.pdf>
- *Hui, C., Law, K. S., & Chen, Z. X. (1999). A structural equation model of the effects of negative affectivity, leader-member exchange, and perceived job mobility on in-role and extra-role performance: A Chinese case. *Organizational Behavior and Human Decision Processes*, 77, 3–21. doi:10.1006/obhd.1998.2812
- *Hui, C., Lee, C., & Rousseau, D. M. (2004). Employment relationships in China: Do workers relate to the organization or to people? *Organization Science*, 15, 232–240. doi:10.1287/orsc.1030.0050
- Hunter, J. E., & Schmidt, F. L. (2004). *Methods of meta-analysis: Correcting error and bias in research findings* (2nd ed.). Thousand Oaks, CA: Sage.
- Hunter, J. E., Schmidt, F. L., & Le, H. (2006). Implications of direct and indirect range restriction for meta-analysis methods and findings. *Journal of Applied Psychology*, 91, 594–612. doi:10.1037/0021-9010.91.3.594
- *Hutchison, S., Valentino, K. E., & Kirkner, S. L. (1998). What works for the gander does not work as well for the goose: The effects of leader behavior. *Journal of Applied Social Psychology*, 28, 171–182. doi:10.1111/j.1559-1816.1998.tb01699.x
- 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. doi:10.1037/0021-9010.92.1.269
- *Ishak, N. A., & Alam, S. S. (2009). Leader-member exchange and organizational citizenship behavior: The mediating impact of self-esteem. *International Journal of Business and Management*, 4, 52–61.
- *Iyengar, K. (2007). *The effect of leadership style on CIO effectiveness* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3288798)
- *Janssen, O., & Van Yperen, N. W. (2004). Employees' goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction. *Academy of Management Journal*, 47, 368–384. doi:10.2307/20159587
- Javidan, M., Dorfman, P. W., de Luque, M. S., & House, R. J. (2006). In the eye of the beholder: Cross cultural lessons in leadership from project GLOBE. *Academy of Management Perspectives*, 20, 67–90. doi:10.5465/AMP.2006.19873410
- *Jenkins, E. Y. (2010). *The effects of leader task-oriented behavior on employee performance* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3425739)
- Jiang, D.-Y., & Cheng, B.-S. (2008). Affect- and role-based loyalty to supervisors in Chinese organizations. *Asian Journal of Social Psychology*, 11, 214–221. doi:10.1111/j.1467-839X.2008.00260.x
- *Jiao, C. (2007). *The effects of leader-member exchange on employee conceptualizations and displays of organizational citizenship behavior: A mediational mode* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. NR28123)
- *Johnson, J. O. (2009). *The empirical relationship between the level of job satisfaction and the quality of leader-member exchange in engineers and scientists at a government aerospace facility* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3392349)
- *Johnson, J., Truxillo, D. M., Erdogan, B., Bauer, T. N., & Hammer, L. (2009). Perceptions of overall fairness: Are effects on job performance moderated by leader-member exchange? *Human Performance*, 22, 432–449. doi:10.1080/08959280903248427
- Johnson, T., Kulesa, P., Cho, Y. I., & Shavitt, S. (2005). The relation between culture and response styles: Evidence from 19 countries. *Journal of Cross-Cultural Psychology*, 36, 264–277. doi:10.1177/0022022104272905
- *Jones, A. P., Glaman, J. M., & Johnson, D. S. (1993). Perceptions of a quality program and relationships with work perceptions and job attitudes. *Psychological Reports*, 72, 619–624. doi:10.2466/pr0.1993.72.2.619
- *Joo, B.-K. (2010). Organizational commitment for knowledge workers: The roles of perceived organizational learning culture, leader-member exchange quality, and turnover intention. *Human Resource Development Quarterly*, 21, 69–85. doi:10.1002/hrdq.20031
- *Judge, T. A., & Ferris, G. R. (1993). Social context of performance evaluation decisions. *Academy of Management Journal*, 36, 80–105. doi:10.2307/256513
- Judge, T. A., & Piccolo, R. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89, 755–768. doi:10.1037/0021-9010.89.5.755
- *Kacmar, K. M., Carlson, D. S., & Brymer, R. A. (1999). Antecedents and consequences of organizational commitment: A comparison of two scales. *Educational and Psychological Measurement*, 59, 976–994. doi:10.1177/00131649921970297
- *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. doi:10.1037/0021-9010.88.4.764
- *Kamdar, D., & Van Dyne, L. (2007). The joint effects of personality and workplace social exchange relationships in predicting task performance and citizenship performance. *Journal of Applied Psychology*, 92, 1286–1298. doi:10.1037/0021-9010.92.5.1286
- *Kang, D. (2004). *The impact of organizational justice and leader-member exchange quality on motivation to participate in training: Centered on the mediating effect of employees' perceived benefits of training* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3134581).
- *Karriker, J. H., & Williams, M. L. (2009). Organizational justice and organizational citizenship behavior: A mediated multifoci model? *Journal of Management*, 35, 112–135. doi:10.1177/0149206307309265
- *Keller, T., & Dansereau, F. (1995). Leadership and empowerment: A social exchange perspective. *Human Relations*, 48, 127–146. doi:10.1177/001872679504800202
- *Keller, T., & Dansereau, F. (2001). The effect of adding items to scales: An illustrative case of LMX. *Organizational Research Methods*, 4, 131–143. doi:10.1177/109442810142003
- *Kent, A., & Chelladurai, P. (2001). Perceived transformational leadership, organizational commitment, and citizenship behavior: A case study in intercollegiate athletics. *Journal of Sport Management*, 15, 135–159.
- *Kim, B., Lee, G., & Carlson, K. D. (2010). An examination of the nature of the relationship between leader-member-exchange (LMX) and turnover intent at different organizational levels. *International Journal of Hospitality Management*, 29, 591–597. doi:10.1016/j.ijhm.2009.10.025
- *Kim, S. K. (2006). *The role of envy in hospitality employees' organizational citizenship behavior: A leader-member exchange perspective* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3229316)
- *Kinicki, A. J., & Vecchio, R. P. (1994). Influences on the quality of supervisor-subordinate relations: The role of time-pressure, organiza-

- tional commitment, and locus of control. *Journal of Organizational Behavior*, 15, 75–82. doi:10.1002/job.4030150108
- *Klein, H. J., & Kim, J. S. (1998). A field study of the influence of situational constraints leader-member exchange, and goal commitment on performance. *Academy of Management Journal*, 41, 88–95. doi:10.2307/256900
- *Ko, J. (2005). *Impact of leadership and team members' individualism-collectivism on team processes and outcomes: A leader-member exchange perspective* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3178416)
- *Kraimer, M. L., Seibert, S. E., Wayne, S. J., Liden, R. C., & Bravo, J. (2011). Antecedents and outcomes of organizational support for development: The critical role of career opportunities. *Journal of Applied Psychology*, 96, 485–500. doi:10.1037/a0021452
- *Kraimer, M. L., & Wayne, S. J. (2004). An examination of perceived organizational support as a multidimensional construct in the context of an expatriate assignment. *Journal of Management*, 30, 209–237. doi:10.1016/j.jm.2003.01.001
- *Kraus, E. (1999). *Leader-member exchange and upward influence: Interrelationships and successful consequences* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 1395749)
- *Kraus, E. (2002). *Personality and job performance: The mediating roles of leader-member exchange quality and action control* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3076648)
- *Krishnan, V. R. (2004). Impact of transformational leadership on followers' influence strategies. *Leadership & Organization Development Journal*, 25, 58–72. doi:10.1108/01437730410512778
- *Krishnan, V. R. (2005). Leader-member exchange, transformational leadership, and value system. *Electronic Journal of Business Ethics and Organization Studies*, 10(1), 14–21.
- *Lam, T. (2003). Leader-member exchange and team-member exchange: The roles of moderators in new employees' socialization. *Journal of Hospitality & Tourism Research*, 27, 48–68. doi:10.1177/1096348002238880
- *Lam, W., Huang, X., & Snape, E. (2007). Feedback-seeking behavior and leader-member exchange: Do supervisor-attributed motive matter? *Academy of Management Journal*, 50, 348–363. doi:10.5465/AMJ.2007.24634440
- *Law, K. S., & Wong, C.-S. (1999). Multidimensional constructs in structural equation analysis: An illustration using the job perception and job satisfaction constructs. *Journal of Management*, 25, 143–160. doi:10.1016/S0149-2063(99)80007-5
- *Law, K. S., Wong, C.-S., Wang, D., & Wang, L. (2000). Effect of supervisor-subordinate guanxi on supervisory decisions in China: An empirical investigation. *International Journal of Human Resource Management*, 11, 751–765. doi:10.1080/09585190050075105
- *Lee, H.-R. (2000). *An empirical study of organizational justice as a mediator of the relationships among leader-member exchange and job satisfaction, organizational commitment, and turnover intentions in the lodging industry* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 9974193)
- *Lee, H.-R., Murrmann, S. K., Murrmann, K. F., & Kim, K. (2010). Organizational justice as a mediator of the relationship between leader-member exchange and employee turnover intentions. *Journal of Hospitality Marketing & Management*, 19, 97–114. doi:10.1080/19368620903455237
- *Lee, J. (2001). Leader-member exchange, perceived organizational justice, and cooperative communication. *Management Communication Quarterly*, 14, 574–589. doi:10.1177/0893318901144002
- *Lee, J. (2005). Effects of leadership and leader-member exchange on commitment. *Leadership & Organization Development Journal*, 26, 655–672. doi:10.1108/01437730510633728
- *Lee, M., & Son, B. (1999). The agreement between self and supervisor ratings: An investigation of leader-member exchange effects. *International Journal of Management*, 16, 77–88.
- *Li, N., Liang, J., & Crant, J. M. (2010). The role of proactive personality in job satisfaction and organizational citizenship behavior: A relational perspective. *Journal of Applied Psychology*, 95, 395–404. doi:10.1037/a0018079
- *Liao, H., Liu, D., & Loi, R. (2010). Looking at both sides of the social exchange coin: A social cognitive perspective on the joint effects of relationship quality and differentiation on creativity. *Academy of Management Journal*, 53, 1090–1109. doi:10.5465/AMJ.2010.54533207
- *Liao, S.-H., Hu, D.-C., & Chung, H.-Y. (2009). The relationship between leader-member relations, job satisfaction and organizational commitment in international tourist hotels in Taiwan. *International Journal of Human Resource Management*, 20, 1810–1826. doi:10.1080/09585190903087222
- *Liden, R. C., Erdogan, B., Wayne, S. J., & Sparrowe, R. T. (2006). Leader-member exchange, differentiation, and task interdependence: Implications for individual and group performance. *Journal of Organizational Behavior*, 27, 723–746. doi:10.1002/job.409
- Liden, R. C., & Graen, G. (1980). Generalizability of the vertical dyad linkage model of leadership. *Academy of Management Journal*, 23, 451–465. doi:10.2307/255511
- Liden, R. C., & Maslyn, J. (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 future. In G. R. Ferris (Ed.), *Research in personnel and human resources management* (Vol. 15, pp. 47–119). Greenwich, CT: JAI Press.
- *Liden, R. C., Wayne, S. J., & Sparrowe, R. T. (2000). An examination of the mediating role of psychological empowerment on the relations between the job, interpersonal relationships, and work outcomes. *Journal of Applied Psychology*, 85, 407–416. doi:10.1037/0021-9010.85.3.407
- *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. doi:10.1037/0021-9010.78.4.662
- *Lindsay, D. (2008). *Polychronicity and its impact on leader-member exchange and outcome behaviors* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3325941)
- *Lippstreu, M. (2010). *Revisiting fundamental concepts of transformational leadership theory: A closer look at follower developmental processes* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3414482)
- Lipsey, M. W., & Wilson, D. (2000). *Practical meta-analysis*. Thousand Oaks, CA: Sage.
- Little, T. D. (2000). On the comparability of constructs in cross-cultural research: A critique of Cheung and Rensvold. *Journal of Cross-Cultural Psychology*, 31, 213–219. doi:10.1177/00220222100031002004
- *Lo, M.-C., Ramayah, T., Min, H. W., & Songan, P. (2010). The relationship between leadership styles and organizational commitment in Malaysia: Role of leader-member exchange. *Asia Pacific Business Review*, 16, 79–103. doi:10.1080/13602380903355676
- *Loi, R., Mao, Y., & Ngo, H. (2009). Linking leader-member exchange and employee work outcomes: The mediating role of organizational social and economic exchange. *Management and Organization Review*, 5, 401–422. doi:10.1111/j.1740-8784.2009.00149.x
- *Loi, R., & Ngo, H. (2009). Work outcomes of relational demography in Chinese vertical dyads. *International Journal of Human Resource Management*, 20, 1704–1719. doi:10.1080/09585190903087057
- *Major, D. A., Kozlowski, S. W. J., Chao, G. T., & Gardner, P. D. (1995). A longitudinal investigation of newcomer expectations, early socialization outcomes, and the moderating effects of role development factors.

- Journal of Applied Psychology*, 80, 418–431. doi:10.1037/0021-9010.80.3.418
- *Manogran, P., Stauffer, J., & Conlon, E. J. (1994). Leader-member exchange as a key mediating variable between employee's perceptions of fairness and organizational citizenship behavior. In *Best paper proceedings of the 54th Annual Meeting of the Academy of Management* (pp. 249–253). Briarcliff Manor, NY: Academy of Management.
- *Markham, S. E., Yammarino, F. J., Murry, W. D., & Palanski, M. E. (2010). Leader-member exchange, shared values, and performance: Agreement and levels of analysis do matter. *Leadership Quarterly*, 21, 469–480. doi:10.1016/j.leaqua.2010.03.010
- *Martin, D. F. (1999). *The impact of trust on leader-member exchange relationships* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 9933461)
- *Maslyn, J. M., & Fedor, D. B. (1998). Perceptions of politics: Does measuring different foci matter? *Journal of Applied Psychology*, 83, 645–653. doi:10.1037/0021-9010.83.4.645
- *Masterson, S. S., Lewis, K., Goldman, B. M., & Taylor, S. M. (2000). Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. *Academy of Management Journal*, 43, 738–748. doi:10.2307/1556364
- *Mehta, A. (2009). *Examining the role of personal, social exchange, and contextual fit variables in employee work outcomes under continuous change: A field investigation* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3386211)
- *Mendez, M. I. (1999). *Leader-member exchange as moderator of the job dissatisfaction-communication response relationship* (Master's thesis). Available from ProQuest Dissertations and Theses database. (UMI No. 1397496)
- Meyer, A. D., Tsui, A. S., & Hinings, C. R. (1993). Configurational approaches to organizational analysis. *Academy of Management Journal*, 36, 1175–1195. doi:10.2307/256809
- *Morrow, P. C., Suzuki, Y., Crum, M. R., Ruben, R., & Pautsch, G. (2005). The role of leader-member exchange in high turnover work environments. *Journal of Managerial Psychology*, 20, 681–694. doi:10.1108/02683940510631444
- *Murphy, S. M. (1997). *Organizational justice: An examination of antecedents and consequences* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 9815176)
- *Murphy, S. M., Wayne, S. J., Liden, R. C., & Erdogan, B. (2003). Understanding social loafing: The role of justice perceptions and exchange relationships. *Human Relations*, 56, 61–84. doi:10.1177/0018726703056001450
- *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. doi:10.1111/j.1559-1816.1999.tb00144.x
- *Nahrgang, J. D., Morgeson, F. P., & Ilies, R. (2009). The development of leader-member exchanges: Exploring how personality and performance influence leader and member relationships over time. *Organizational Behavior and Human Decision Processes*, 108, 256–266. doi:10.1016/j.obhdp.2008.09.002
- *Nathan, B. R., Mohrman, A. M., Jr., & Milliman, J. (1991). Interpersonal relations as a context for the effects of appraisal interviews on performance and satisfaction: A longitudinal study. *Academy of Management Journal*, 34, 352–369. doi:10.2307/256446
- Ng, K. Y., Koh, C., Ang, S., Kennedy, J. C., & Chan, K. Y. (2011). Rating leniency and halo in multisource feedback ratings: Testing cultural assumptions of power distance and individualism-collectivism. *Journal of Applied Psychology*, 96, 1033–1044. doi:10.1037/a0023368
- *Novak, M. A. (1984). *A study of leader resources as determinants of leader-member exchange (power)* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 8509493)
- *Nystrom, P. C. (1990). Vertical exchanges and organizational commitments of American business managers. *Group & Organization Management*, 15, 296–312. doi:10.1177/105960119001500305
- *O'Donnell, M. E. (2009). *The influence of leader behaviors on the leader-member exchange relationship* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3350104)
- *O'Driscoll, M. P., & Beehr, T. A. (1994). Supervisor behaviors, role stressors and uncertainty as predictors of personal outcomes for subordinates. *Journal of Organizational Behavior*, 15, 141–155. doi:10.1002/job.4030150204
- *Paglis, L. L., & Green, S. G. (2002). Leadership self-efficacy and managers' motivation for leading change. *Journal of Organizational Behavior*, 23, 215–235. doi:10.1002/job.137
- *Palacios, J. A., Jr. (2010). *Job role ambiguity as a mediator between workplace communication and positive work outcomes* (Master's thesis). Available from ProQuest Dissertations and Theses database. (UMI No. 1490405)
- *Pelled, L. H., & Xin, K. R. (2000). Relational demography and relationship quality in two cultures. *Organization Studies*, 21, 1077–1094. doi:10.1177/0170840600216003
- *Pellegrini, E. K., & Scandura, T. A. (2006). Leader-member exchange (LMX), paternalism, and delegation in the Turkish business culture: An empirical investigation. *Journal of International Business Studies*, 37, 264–279. doi:10.1057/palgrave.jibs.8400185
- *Pellegrini, E. K., Scandura, T. A., & Jayaraman, V. (2010). Cross-cultural generalizability of paternalistic leadership: An expansion of leader-member exchange theory. *Group & Organization Management*, 35, 391–420. doi:10.1177/1059601110378456
- *Perizade, B., & Sulaiman, M. (2005). Leader-member exchange and leadership effectiveness of chief executive officers in South Sumatra, Indonesia. *Business Review*, 4, 331–337.
- *Phillips, A. S., & Bedeian, A. G. (1994). Leader-follower exchange quality: The role of personal and interpersonal attributes. *Academy of Management Journal*, 37, 990–1001. doi:10.2307/256608
- *Piccolo, R. F., & Colquitt, J. A. (2006). Transformational leadership and job behaviors: The mediating role of core job characteristics. *Academy of Management Journal*, 49, 327–340. doi:10.5465/AMJ.2006.20786079
- *Pierce, H. R. (2001). *Employee development as an exchange process: Perceived organizational support, leader-member exchange and perception of benefit* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3015679)
- *Pillai, R., Scandura, T. A., & Williams, E. A. (1999). Leadership and organizational justice: Similarities and differences across cultures. *Journal of International Business Studies*, 30, 763–779. doi:10.1057/palgrave.jibs.8490838
- Podsakoff, P. M., Bommer, W. H., Podsakoff, N. P., & MacKenzie, S. B. (2006). Relationships between leader reward and punishment behavior and subordinate attitudes, perceptions and behaviors: A meta-analytic review of existing and new research. *Organizational Behavior and Human Decision Processes*, 99, 113–142. doi:10.1016/j.obhdp.2005.09.002
- *Polly, L. M. (2002). *Social exchange and customer service: The relationship between perceived organizational support, leader-member exchange, and customer service behavior* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3057383)
- *Rahn, D. L. (2010). *The role of follower self-concept and implicit leadership theories in transformational leadership and leader-member exchange* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3396741)
- *Ren, R. (2007). *Quality of supervisor-subordinate relationship, cultural values, and organizational justice* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3296523)

- *Richins, S. I. (2003). *Quid pro quo or quid pro quid? An empirical examination of the currencies of exchange approach to leader-member exchange* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3089790)
- *Roch, S. G., & Shanock, L. R. (2006). Organizational justice in an exchange framework: Clarifying organizational justice distinctions. *Journal of Management*, 32, 299–322. doi:10.1177/0149206305280115
- Rockstuhl, T., Seiler, S., Ang, S., Van Dyne, L., & Annen, H. (2011). Beyond general intelligence (IQ) and emotional intelligence (EQ): The role of cultural intelligence (CQ) on cross-border leadership effectiveness in a globalized world. *Journal of Social Issues*, 67, 825–840. doi:10.1111/j.1540-4560.2011.01730.x
- Rodriguez, M. C., & Maeda, Y. (2006). Meta-Analysis of coefficient alpha. *Psychological Methods*, 11, 306–322. doi:10.1037/1082-989X.11.3.306
- Sahlins, M. (1972). *Stone age economics*. New York, NY: Aldine de Gruyter.
- *Sanchez, R. J. (2002). *The role of trust, leader-member exchange, and organizational justice in employee attitudes and behaviors: A laboratory and field investigation* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3183765)
- Scandura, T. A., & Graen, G. B. (1984). Moderating effects of initial leader-member exchange status on the effects of a leadership intervention. *Journal of Applied Psychology*, 69, 428–436. doi:10.1037/0021-9010.69.3.428
- *Scandura, T. A., Graen, G. B., & Novak, M. A. (1986). When managers decide not to decide autocratically: An investigation of leader-member exchange and decision influence. *Journal of Applied Psychology*, 71, 579–584. doi:10.1037/0021-9010.71.4.579
- *Scandura, T. A., & Pellegrini, E. (2008). Trust and leader-member exchange: A closer look at relational vulnerability. *Journal of Leadership & Organizational Studies*, 15, 101–110. doi:10.1177/1548051808320986
- *Scandura, T. A., & Schriesheim, C. A. (1994). Leader-member exchange and supervisor career mentoring. *Academy of Management Journal*, 37, 1588–1602. doi:10.2307/256800
- *Schaninger, W. S., Jr. (2002). *The workplace social exchange network: An empirical examination* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3044025)
- *Schriesheim, C. A., Castro, S. L., & Yammarino, F. J. (2000). Investigating contingencies: An examination of the impact of span of supervision and upward controllability on leader-member exchange using traditional and multivariate within- and between-entities analysis. *Journal of Applied Psychology*, 85, 659–677. doi:10.1037/0021-9010.85.5.659
- *Schriesheim, C. A., Neider, L. L., & Scandura, T. A. (1998). Delegation and leader-member exchange: Main effects, moderators, and measurement issues. *Academy of Management Journal*, 41, 298–318. doi:10.2307/256909
- *Schriesheim, C. A., Neider, L. L., Scandura, T. A., & Tepper, B. J. (1992). Development and preliminary validation of a new scale (LMX-6) to measure leader-member exchange in organizations. *Educational and Psychological Measurement*, 52, 135–147. doi:10.1177/001316449205200119
- *Schyns, B., Paul, T., Mohr, G., & Blank, H. (2005). Comparing antecedents and consequences of leader-member exchange in a German working context to findings in the US. *European Journal of Work and Organizational Psychology*, 14, 1–22. doi:10.1080/13594320444000191
- *Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal*, 37, 580–607. doi:10.2307/256701
- *Seers, A. (1989). Team-member exchange quality: A new construct for role-making research. *Organizational Behavior and Human Decision Processes*, 43, 118–135. doi:10.1016/0749-5978(89)90060-5
- *Seers, A., & Graen, G. B. (1984). The dual attachment concept: A longitudinal investigation of the combination of task characteristics and leader-member exchange. *Organizational Behavior and Human Performance*, 33, 283–306. doi:10.1016/0030-5073(84)90025-4
- *Sekiguchi, T., Burton, J., & Sablinski, C. (2008). The role of job embeddedness on employee performance: The interactive effects with leader-member exchange and organization-based self-esteem. *Personnel Psychology*, 61, 761–792. doi:10.1111/j.1744-6570.2008.00130.x
- *Settoon, R. P., Bennett, N., & Liden, R. C. (1996). Social exchange in organizations: Perceived organizational support, leader-member exchange, and employee reciprocity. *Journal of Applied Psychology*, 81, 219–227. doi:10.1037/0021-9010.81.3.219
- *Shalhoop, J. H. (2004). *Social exchange as a mediator of the relationship between organizational justice and workplace outcomes* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3108226)
- *Shapiro, D. L., Boss, A. D., Salas, S., Tangirala, S., & Von Glinow, M. A. (2011). When are transgressing leaders punitively judged? An empirical test. *Journal of Applied Psychology*, 96, 412–422. doi:10.1037/a0021442
- Shavitt, S., Lalwani, A. K., Zhang, J., & Torelli, C. J. (2006). The horizontal/vertical distinction in cross-cultural consumer research. *Journal of Consumer Psychology*, 16, 325–342. doi:10.1207/s15327663jcp1604_3
- *Sherony, K. M. (2002). *Leader emotional expression and leader-member exchange* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3099851)
- Shore, L. M., Coyle-Shapiro, J. A.-M., Chen, X.-P., & Tetrick, L. E. (2009). Social exchange in work settings: Content, process, and mixed models. *Management and Organization Review*, 5, 289–302. doi:10.1111/j.1740-8784.2009.00158.x
- *Shull, C. K. (1994). *The effects of leader-member exchange relations on organizational citizenship behaviors* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 9517484)
- *Sias, P. M. (2005). Workplace relationship quality and employee information experiences. *Communication Studies*, 56, 375–395. doi:10.1080/10510970500319450
- Singelis, T. M., Triandis, H. C., Bhawuk, D. P. S., & Gelfand, M. J. (1995). Horizontal and vertical dimensions of individualism and collectivism: A theoretical and measurement refinement. *Cross-Cultural Research*, 29, 240–275. doi:10.1177/106939719502900302
- *Smith, M. L., Jr. (2002). *Reciprocity and social exchange relationships in organizations: Examining why and how individuals contribute to organizational social capital* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3078881)
- *Soldner, J. L., & Crimando, W. (2010). Relationships among leader-member exchange, organizational citizenship, organizational commitment, dyadic gender, and dyadic duration in a rehabilitation center. *Journal of Rehabilitation Administration*, 34, 25–34.
- *Sparrowe, R. T. (1994). Empowerment in the hospitality industry: An exploration of antecedents and outcomes. *Journal of Hospitality & Tourism Research*, 17, 51–73. doi:10.1177/109634809401700306
- *Sparrowe, R. T., Soetjijto, 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. doi:10.5465/AMJ.2006.23478645
- *Stepina, L. P., Hassell, B. L., Harris, J. R., & Mayfield, C. R. (1991). A comparative test of the independent effects of interpersonal, task, and reward domains on personal and organizational outcomes. *Journal of Social Behavior and Personality*, 6, 93–104.
- *Story, J. S. (2010). *Testing the impact of global mindset on positive outcomes: A multilevel analysis* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3398225)

- *Stringer, L. (2006). The link between the quality of the supervisor–employee relationship and the level of the employee's job satisfaction. *Public Organization Review*, 6, 125–142. doi:10.1007/s11115-006-0005-0
- *Suazo, M. K. (2002). *An examination of antecedents and consequences of psychological contract breach* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3083200)
- *Tansky, J. W. (1993). Justice and organizational citizenship behavior: What is the relationship? *Employee Responsibilities and Rights Journal*, 6, 195–207. doi:10.1007/BF01419444
- Taras, V., Kirkman, B. L., & Steel, P. (2010). Examining the impact of culture's consequences: A three-decade, multilevel, meta-analytic review of Hofstede's cultural value dimensions. *Journal of Applied Psychology*, 95, 405–439. doi:10.1037/a0018938
- *Tekleab, A. G., Taylor, S. M. (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. doi:10.1002/job.204
- *Tepper, B. J., Uhl-Bien, M., Kohut, G. F., Rogelberg, S. G., Lockhart, D. E., & Ensley, M. D. (2006). Subordinates' resistance and managers' evaluations of subordinates' performance. *Journal of Management*, 32, 185–209. doi:10.1177/0149206305277801
- *Tierney, P., Bauer, T. N., & Potter, R. E. (2002). Extra-role behavior among Mexican employees: The impact of LMX, group acceptance, and job attitudes. *International Journal of Selection and Assessment*, 10, 292–303. doi:10.1111/1468-2389.00219
- *Tierney, P., Farmer, S. M., & Graen, G. B. (1999). An examination of leadership and employee creativity: The relevance of traits and relationships. *Personnel Psychology*, 52, 591–620. doi:10.1111/j.1744-6570.1999.tb00173.x
- *Townsend, J. C., Da Silva, N., Mueller, L., Curtin, P., & Tetrick, L. E. (2002). Attributional complexity: A link between training, job complexity, decision latitude, leader–member exchange, and performance. *Journal of Applied Social Psychology*, 32, 207–221. doi:10.1111/j.1559-1816.2002.tb01427.x
- *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. doi:10.1037/1076-8998.5.4.457
- *Trepanier, C. (2011). *Managerial coaching and seller performance: A relational approach* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (NR70635)
- Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.
- Triandis, H. C. (2004). The many dimensions of culture. *Academy of Management Executive*, 18, 88–93. doi:10.5465/AME.2004.12689599
- Triandis, H. C., & Gelfand, M. J. (1998). Converging measurement of horizontal and vertical individualism and collectivism. *Journal of Personality and Social Psychology*, 74, 118–128. doi:10.1037/0022-3514.74.1.118
- *Truckenbrodt, Y. B. (2000). *An empirical assessment of the relationship between leader–member exchange and organizational commitment and organizational citizenship behavior* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 9988008)
- Tsui, A. S., Nifadkar, S. S., & Ou, A. Y. (2007). Cross-national, cross-cultural organizational behavior research: Advances, gaps, and recommendations. *Journal of Management*, 33, 426–478. doi:10.1177/0149206307300818
- *Uhl-Bien, M., & Maslyn, J. M. (2003). Reciprocity in manager–subordinate relationships: Components, configurations, and outcomes. *Journal of Management*, 29, 511–532.
- *van Breukelen, W., Konst, D., & Van Der Vlist, R. (2002). Effects of LMX and differential treatment on work unit commitment. *Psychological Reports*, 91, 220–230. doi:10.2466/pr0.2002.91.1.220
- Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods*, 3, 4–69. doi:10.1177/109442810031002
- van de Vijver, F. J. R., & Leung, K. (1997). *Methods and data analysis for cross-cultural research*. Newbury Park, CA: Sage.
- *Van Dyne, L., Jehn, K. A., & Cummings, A. (2002). Differential effects of strain on two forms of work performance: Individual employee sales and creativity. *Journal of Organizational Behavior*, 23, 57–74. doi:10.1002/job.127
- *Van Dyne, L., Kamdar, D., & Joireman, J. (2008). In-role perceptions buffer the negative impact of low LMX on helping and enhance the positive impact of high LMX on voice. *Journal of Applied Psychology*, 93, 1195–1207. doi:10.1037/0021-9010.93.6.1195
- van Knippenberg, D., & Hogg, M. A. (2003). A social identity model of leadership effectiveness in organizations. *Research in Organizational Behavior*, 25, 243–295. doi:10.1016/S0191-3085(03)25006-1
- *Vecchio, R. P. (1985). Predicting employee turnover from leader–member exchange: A failure to replicate. *Academy of Management Journal*, 28, 478–485. doi:10.2307/256213
- *Vecchio, R. P. (1987). Situational leadership theory: An examination of a prescriptive theory. *Journal of Applied Psychology*, 72, 444–451. doi:10.1037/0021-9010.72.3.444
- *Vecchio, R. P., & Brazil, D. M. (2007). Leadership and sex-similarity: A comparison in a military setting. *Personnel Psychology*, 60, 303–335. doi:10.1111/j.1744-6570.2007.00075.x
- *Vecchio, R. P., Bullis, C., & Brazil, D. M. (2006). The utility of situational leadership theory: A replication in a military setting. *Small Group Research*, 37, 407–424. doi:10.1177/1046496406291560
- *Vecchio, R. P., & Gobdel, B. C. (1984). The vertical dyad linkage model of leadership: Problems and prospects. *Organizational Behavior and Human Performance*, 34, 5–20. doi:10.1016/0030-5073(84)90035-7
- *Vecchio, R. P., Griffeth, R. W., & Hom, P. W. (1986). The predictive utility of the vertical dyad linkage approach. *Journal of Social Psychology*, 126, 617–625. doi:10.1080/00224545.1986.9713634
- *Vecchio, R. P., & Norris, W. R. (1996). Predicting employee turnover from performance, satisfaction, and leader–member exchange. *Journal of Business and Psychology*, 11, 113–125. doi:10.1007/BF02278260
- *Venkataramani, V., Green, S. G., & Schleicher, D. J. (2010). Well-connected leaders: The impact of leaders' social network ties on LMX and members' work attitudes. *Journal of Applied Psychology*, 95, 1071–1084. doi:10.1037/a0020214
- *Vidyardhi, P. R., Liden, R. C., Anand, S., Erdogan, B., & Ghosh, S. (2010). Where do I stand? Examining the effects of leader–member exchange social comparison on employee work behaviors. *Journal of Applied Psychology*, 95, 849–861. doi:10.1037/a0020033
- Vodosek, M. (2009). The relationship between relational models and individualism and collectivism: Evidence from culturally diverse work groups. *International Journal of Psychology*, 44, 120–128. doi:10.1080/00207590701545684
- *Volmer, J., Niessen, C., Spurk, D., Linz, A., & Abele, A. E. (2011). Reciprocal relationships between leader–member exchange (LMX) and job satisfaction: A cross-lagged analysis. *Applied Psychology*, 60, 522–545. doi:10.1111/j.1464-0597.2011.00446.x
- *Waismel-Manor, R., Tziner, A., Berger, E., & Dikstein, E. (2010). Two of a kind? Leader–member exchange and organizational citizenship behaviors: The moderating role of leader–member similarity. *Journal of Applied Social Psychology*, 40, 167–181. doi:10.1111/j.1559-1816.2009.00568.x
- *Wang, H., Law, K. S., & Chen, Z. X. (2008). Leader–member exchange, employee performance, and work outcomes: An empirical study in the Chinese context. *International Journal of Human Resource Management*, 19, 1809–1824. doi:10.1080/09585190802323926

- *Wang, H., Law, K. S., Hackett, R. D., Wang, D., & Chen, Z. X. (2005). Leader-member exchange as a mediator of the relationship between transformational leadership and followers' performance and organizational citizenship behavior. *Academy of Management Journal*, 48, 420–432. doi:10.5465/AMJ.2005.17407908
- *Wasti, S. A., & Can, Ö. (2008). Affective and normative commitment to organization, supervisor, and coworkers: Do collectivist values matter? *Journal of Vocational Behavior*, 73, 404–413. doi:10.1016/j.jvb.2008.08.003
- *Wat, D., & Shaffer, M. A. (2005). Equity and relationship quality influences on organizational citizenship behaviors: The mediating role of trust in the supervisor and empowerment. *Personnel Review*, 34, 406–422. doi:10.1108/00483480510599752
- *Watson, C. (2010). *The relationship of subordinate perceptions of leader-member exchange and reciprocity norms on the quality of integrative trust: A police officer census* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3389194)
- *Wayne, S. J., & Ferris, G. R. (1990). Influence tactics, affect, and exchange quality in supervisor-subordinate interactions: A laboratory experiment and field study. *Journal of Applied Psychology*, 75, 487–499. doi:10.1037/0021-9010.75.5.487
- *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. doi:10.1177/001872679304601204
- *Wayne, S. J., Liden, R. C., Kraimer, M. L., & Graf, I. K. (1999). The role of human capital, motivation and supervisor sponsorship in predicting career success. *Journal of Organizational Behavior*, 20, 577–595. doi:10.1002/(SICI)1099-1379(199909)20:5<577::AID-JOB958>3.0.CO;2-0
- *Wayne, S. J., Shore, L. M., Bommer, W. H., & Tetrick, L. E. (2002). The role of fair treatment and rewards in perceptions of organizational support and leader-member exchange. *Journal of Applied Psychology*, 87, 590–598. doi:10.1037/0021-9010.87.3.590
- *Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40, 82–111. doi:10.2307/257021
- *Wech, B. A. (2001). *Team-member exchange and trust contexts: Effects on individual level outcome variables beyond the influence of leader-member exchange* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3021460)
- *Wheeler, A. R., Harris, K. J., & Harvey, P. (2010). Moderating and mediating the HRM effectiveness-intent to turnover relationship: The roles of supervisors and job embeddedness. *Journal of Managerial Issues*, 22, 182–196.
- *White, C. (2007). *The leader-member exchange as a function of leader rapport management behavior* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3270514)
- *Whittington, J. L. (1997). *An integrative model of transformational leadership and follower behavior* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 9804688)
- *Wilhelm, C. C., Herd, A. M., & Steiner, D. D. (1993). Attributional conflict between managers and subordinates: An investigation of leader-member exchange effects. *Journal of Organizational Behavior*, 14, 531–544. doi:10.1002/job.4030140603
- *Williams, L. J., Gavin, M. B., & Williams, M. L. (1996). Measurement and nonmeasurement processes with negative affectivity and employee attitudes. *Journal of Applied Psychology*, 81, 88–101. doi:10.1037/0021-9010.81.1.88
- Wu, J. B., Hom, P. W., Tetrick, L. E., Shore, L. M., Jia, L., Li, C., & Song, L. J. (2006). The norm of reciprocity: Scale development and validation in the Chinese context. *Management and Organization Review*, 2, 377–402. doi:10.1111/j.1740-8784.2006.00047.x
- *Wu, Y.-J. (2009). *A multidimensional analysis of the relationship between leader-member exchange and organizational citizenship behavior with an alternative measure of leader-member exchange* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3359347)
- *Yagil, D. (2006). Perceptions of justice within leader-employee dyads. *International Journal of Organization Theory and Behavior*, 9, 291–306.
- *Yeh, Y. M. (2005). *An investigation of the impact of leader-member exchange, team-member exchange on staff attitudes and perceptions for accounting professionals* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3185866)
- *Yi, X. (2002). *Guanxi and leader-member exchange in the Chinese context* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3044268).
- *Zalesny, M. D., & Kirsch, M. P. (1989). The effect of similarity on performance ratings and interrater agreement. *Human Relations*, 42, 81–96. doi:10.1177/001872678904200105
- Zand, D. E. (1972). Trust and managerial problem solving. *Administrative Science Quarterly*, 17, 229–239. doi:10.2307/2393957
- *Zhang, Z., Wang, M., & Shi, J. (2010, August). *Leader-follower congruence in proactive personality and work outcomes: The mediating role of LMX*. Paper presented at the annual meeting of the Academy of Management, Montréal, Canada.

Appendix

Summary of Studies Included in the Current Meta-Analysis and Coding for Moderators

Study	N	Moderator coding		Variable	LMX/correlate		
		Country	HI/VC		r	α	Var
Anand et al. (2010)	246	India	VC	LMX		.90	1.08
Anand et al. (2010)	246	India	VC	OCB	.18	.62	1.00
Anderson & Williams (1996)	465	United States	HI	LMX		.90	0.56
Anderson & Williams (1996)	465	United States	HI	OCB	.36	.94	0.71
Andrews & Kacmar (2001)	418	United States	HI	LMX		.90	0.98
Andrews & Kacmar (2001)	418	United States	HI	DJ	.26	.93	1.10
Andrews & Kacmar (2001)	418	United States	HI	PJ	.30	.82	0.58
Aryee & Chen (2006)	237	China	VC	LMX		.82	
Aryee & Chen (2006)	237	China	VC	TP	.31	.83	
Aryee & Chen (2006)	237	China	VC	JS	.50	.89	
Aryee & Chen (2006)	237	China	VC	TI	-.35	.91	
Ballinger et al. (2010)	496	United States	HI	LMX		.95	0.79
Ballinger et al. (2010)	496	United States	HI	TI	-.43	.89	1.61
Barbuto & Wheeler (2006)	388	United States	HI	LMX		.89	0.48
Barbuto & Wheeler (2006)	388	United States	HI	TL	.38	.89	0.42
Basu (1991)	289	United States	HI	LMX		.89	0.71
Basu (1991)	289	United States	HI	TP	.22	.85	0.17
Basu (1991)	289	United States	HI	AC	.35	.83	0.49
Basu (1991)	289	United States	HI	TL	.70	.93	0.64
Basu & Green (1995)	225	United States	HI	LMX		.89	0.71
Basu & Green (1995)	225	United States	HI	OCB	.22	.93	0.50
Basu & Green (1995)	225	United States	HI	AC	.35	.89	0.49
Basu & Green (1995)	225	United States	HI	TL	.70	.93	0.64
Bauer et al. (2006)	67	United States	HI	LMX		.90	0.59
Bauer et al. (2006)	67	United States	HI	TP	.33	.91	0.55
Bauer et al. (2006)	67	United States	HI	TI	-.02	.87	0.76
Bauer & Green (1996)	311	United States	HI	LMX		.94	1.51
Bauer & Green (1996)	311	United States	HI	TP	.57	.95	1.59
Bernerth (2005)	195	United States	HI	LMX		.90	1.19
Bernerth (2005)	195	United States	HI	TP	.16	.93	0.79
Bernerth (2005)	195	United States	HI	OCB	.14	.92	0.27
Bernerth (2005)	195	United States	HI	JS	.43	.88	1.30
Bernerth (2005)	195	United States	HI	AC	.46	.89	1.66
Bernerth (2005)	195	United States	HI	TI	-.29	.87	2.56
Bettencourt (2004), Sample 1	630	United States	HI	LMX		.89	2.02
Bettencourt (2004), Sample 1	630	United States	HI	AC	.44	.89	1.32
Bettencourt (2004), Sample 1	630	United States	HI	TL	.88	.93	2.25
Bettencourt (2004), Sample 2	183	United States	HI	LMX		.89	2.02
Bettencourt (2004), Sample 2	183	United States	HI	OCB	.25	.92	0.45
Bhal (2006)	306	India	VC	LMX		.91	0.53
Bhal (2006)	306	India	VC	OCB	.17	.63	0.25
Bhal (2006)	306	India	VC	DJ	.16	.78	0.88

(Appendix continues)

Appendix (continued)

Study	N	Moderator coding		LMX/correlate			
		Country	HI/ VC	Variable	r	α	Var
Bhal (2006)	306	India	VC	PJ	.41	.78	0.44
Bhal (2006)	306	India	VC	IJ	.38	.80	0.34
Bhal & Ansari (2007)	295	India	VC	LMX		.90	0.61
Bhal & Ansari (2007)	295	India	VC	DJ	.10	.77	0.88
Bhal & Ansari (2007)	295	India	VC	PJ	.32	.77	0.42
Bhal & Ansari (2007)	295	India	VC	JS	.22	.86	0.76
Bhal & Ansari (2007)	295	India	VC	AC	.21	.75	0.30
Bhal et al. (2009)	306	India	VC	LMX		.88 ^a	0.61
Bhal et al. (2009)	306	India	VC	OCB	.16	.63	0.25
G. Blau (1988)	69	United States	HI	LMX		.87	0.64
G. Blau (1988)	69	United States	HI	TP	.30	.74	0.69
G. Blau (1988)	69	United States	HI	AC	.33	.89	0.45
Botero (2005), Sample 1	123	United States	HI	LMX		.95	1.39
Botero (2005), Sample 1	123	United States	HI	OCB	.49	.90	1.35
Botero (2005), Sample 1	123	United States	HI	JS	.43	.91	1.99
Botero (2005), Sample 2	147	Colombia	VC	LMX		.93	1.28
Botero (2005), Sample 2	147	Colombia	VC	OCB	.39	.85	1.46
Botero (2005), Sample 2	147	Colombia	VC	JS	.31	.80	1.30
Boulanger (2008)	168	United States	HI	LMX		.91	2.26
Boulanger (2008)	168	United States	HI	TP	.14	.93	0.52
Boulanger (2008)	168	United States	HI	LT	.54	.92	0.29
Bowman (2010)	128	United States	HI	LMX		.93	0.96
Bowman (2010)	128	United States	HI	TI	-.29	.91	2.92
Brandes et al. (2004)	129	United States	HI	LMX		.93	1.51
Brandes et al. (2004)	129	United States	HI	TP	.38	.93	0.94
Brandes et al. (2004)	129	United States	HI	OCB	.39	.93	1.17
Brouer (2007)	79	United States	HI	LMX		.79	0.40
Brouer (2007)	79	United States	HI	OCB	.37	.82	0.14
Brouer (2007)	79	United States	HI	AC	.42	.91	0.45
Brouer (2007)	79	United States	HI	LT	.80	.91	0.37
Brunetto et al. (2010)	1,064	Australia	HI	LMX		.93	0.64
Brunetto et al. (2010)	1,064	Australia	HI	AC	.42	.87	1.00
Butler (2010)	397	United States	HI	LMX		.93	1.14
Butler (2010)	397	United States	HI	JS	.50	.76	0.64
Butler (2010)	397	United States	HI	AC	.49	.93	1.23
Butler (2010)	397	United States	HI	TI	-.46	.86	0.96
Carter (2010)	49	United States	HI	LMX		.90 ^a	0.83
Carter (2010)	49	United States	HI	OCB	.08	.88	0.77
Castleberry & Tanner (1989)	45	United States	HI	LMX		.88	
Castleberry & Tanner (1989)	45	United States	HI	AC	.44	.86 ^a	
Chan (2004)	147	United States	HI	LMX		.87	1.00
Chan (2004)	147	United States	HI	AC	.50	.68	3.17
Chan (2004)	147	United States	HI	NC	.17	.63	3.20
Chan (2004)	147	United States	HI	JS	.45	.89	1.25
Chang (2005)	428	United States	HI	LMX		.91	
Chang (2005)	428	United States	HI	TI	-.36	.89	1.42
Y. Chen et al. (2009)	209	China	VC	LMX		.95	0.88
Y. Chen et al. (2009)	209	China	VC	AC	.51	.89	0.86
Y. Chen et al. (2009)	209	China	VC	TI	-.06	.89	1.44
Z. Chen et al. (2007)	238	China	VC	LMX		.81	0.24
Z. Chen et al. (2007)	238	China	VC	TP	.23	.86	1.04
Z. X. Chen et al. (2008)	273	China	VC	LMX		.75	0.52
Z. X. Chen et al. (2008)	273	China	VC	TP	.25	.96	
Z. X. Chen et al. (2008)	273	China	VC	OCB	.21	.88	1.25
Z. X. Chen et al. (2008)	273	China	VC	AC	.20	.74	0.94
Chi & Lo (2003)	104	Taiwan	VC	LMX		.92	0.86
Chi & Lo (2003)	104	Taiwan	VC	DJ	.15	.70	0.56
Chi & Lo (2003)	104	Taiwan	VC	PJ	.38	.86	0.29
Chuang & Shen (2008)	184	Taiwan	VC	LMX		.84	
Chuang & Shen (2008)	184	Taiwan	VC	AC	.29	.85	

(Appendix continues)

Appendix (continued)

Study	N	Moderator coding		LMX/correlate			
		Country	HI/ VC	Variable	r	α	Var
Chuang & Shen (2008)	184	Taiwan	VC	TI	-.32	.85	
Clemens et al. (2009)	188	United States	HI	LMX		.95	0.98
Clemens et al. (2009)	188	United States	HI	JS	.74	.83	0.23
Clemens et al. (2009)	188	United States	HI	TI	-.41	.89	3.69
Cogliser et al. (2009)	285	United States	HI	LMX		.92	0.67
Cogliser et al. (2009)	285	United States	HI	TP	.35	.94	1.12
Cogliser et al. (2009)	285	United States	HI	JS	.60	.91	0.34
Cogliser et al. (2009)	285	United States	HI	AC	.37	.90	0.56
Collins & George (2010)	1,024	United States	HI	LMX		.89	0.69
Collins & George (2010)	1,024	United States	HI	JS	.71	.93	0.42
Collins & George (2010)	1,024	United States	HI	TI	-.44	.76	0.83
Connell (2005)	131	United States	HI	LMX		.90	0.58
Connell (2005)	131	United States	HI	OCB	.27	.88	1.19
Connell (2005)	131	United States	HI	TL	.77	.90	0.98
DeConinck (2009)	419	United States	HI	LMX		.95	1.27
DeConinck (2009)	419	United States	HI	AC	.44	.87	0.28
DeConinck (2009)	419	United States	HI	TI	-.34	.30	0.57
DeConinck (2011)	365	United States	HI	LMX		.93	0.57
DeConinck (2011)	365	United States	HI	TP	.40	.76	0.93
DeConinck (2011)	365	United States	HI	AC	.55	.87	0.61
DeConinck (2011)	365	United States	HI	TI	-.37	.82	2.56
Deluga (1992)	145	United States	HI	LMX		.92	0.58
Deluga (1992)	145	United States	HI	TL	.84	.97	0.85
Deluga (1998)	123	United States	HI	LMX		.88	1.32
Deluga (1998)	123	United States	HI	TP	.25	.94	0.98
Deluga (1998)	123	United States	HI	OCB	.28	.93	0.58
Deluga & Perry (1994)	152	United States	HI	LMX		.91	0.23
Deluga & Perry (1994)	152	United States	HI	TP	.35	.89	0.71
DelVecchio (1998)	155	United States	HI	LMX		.85	1.27
DelVecchio (1998)	155	United States	HI	TP	.07	.81	
Dolden (2001)	98	United States	HI	LMX		.94	1.49
Dolden (2001)	98	United States	HI	AC	.55	.88	2.13
Dolden (2001)	98	United States	HI	NC	.51	.83	1.39
Dolden (2001)	98	United States	HI	CC	-.20	.83	1.61
Dolden (2001)	98	United States	HI	JS	.66	.93	0.42
Dolden (2001)	98	United States	HI	TI	-.48	.94	2.82
Duarte et al. (1993)	367	United States	HI	LMX		.82	1.43
Duarte et al. (1993)	367	United States	HI	TP	.23	.89 ^a	1.99
Duarte et al. (1994)	261	United States	HI	LMX		.82	0.47
Duarte et al. (1994)	261	United States	HI	TP	.23	.82	2.53
Dunegan (2003)	193	United States	HI	LMX		.92	0.80
Dunegan (2003)	193	United States	HI	JS	.46	.79	1.17
Dunegan (2003)	193	United States	HI	AC	.53	.86	1.02
Dunegan (2003)	193	United States	HI	TI	-.35	.84	3.24
Dunegan et al. (1992)	152	United States	HI	LMX		.79	0.54
Dunegan et al. (1992)	152	United States	HI	TP	.38	.95	1.01
Dunegan et al. (2002)	146	United States	HI	LMX		.79	0.54
Dunegan et al. (2002)	146	United States	HI	TP	.36	.95	1.05
Eisenberger et al. (2010), Sample 1	251	United States	HI	LMX		.87	0.96
Eisenberger et al. (2010), Sample 1	251	United States	HI	TP	.23	.92	1.46
Eisenberger et al. (2010), Sample 1	251	United States	HI	OCB	.19	.94	1.66
Eisenberger et al. (2010), Sample 1	251	United States	HI	AC	.33	.87	1.82
Eisenberger et al. (2010), Sample 2	346	Portugal	VC	LMX		.84	0.81
Eisenberger et al. (2010), Sample 2	346	Portugal	VC	TP	.28	.81	0.96
Eisenberger et al. (2010), Sample 2	346	Portugal	VC	OCB	.35	.91	1.04
Eisenberger et al. (2010), Sample 2	346	Portugal	VC	AC	.56	.83	1.54
Elicker et al. (2006)	188	United States	HI	LMX		.88	0.42

(Appendix continues)

Appendix (*continued*)

Study	N	Moderator coding		Variable	LMX/correlate		
		Country	HI/ VC		r	α	Var
Elicker et al. (2006)	188	United States	HI	TP	.26	.71	0.08
Elicker et al. (2006)	188	United States	HI	DJ	.45	.95	0.83
Elicker et al. (2006)	188	United States	HI	PJ	.50	.95	1.74
Elicker et al. (2006)	188	United States	HI	IJ	.51	.89	1.06
Epitropaki & Martin (1999)	73	England	HI	LMX		.92	
Epitropaki & Martin (1999)	73	England	HI	JS	.71	.90	
Epitropaki & Martin (1999)	73	England	HI	AC	.39	.76	
Epitropaki & Martin (2005)	439	England	HI	LMX		.91	0.77
Epitropaki & Martin (2005)	439	England	HI	JS	.60	.75	1.28
Epitropaki & Martin (2005)	439	England	HI	AC	.33	.84	1.39
Erdogan (2002), Sample 1	261	United States	HI	LMX		.90	1.14
Erdogan (2002), Sample 1	261	United States	HI	DJ	.40	.60	1.66
Erdogan (2002), Sample 1	261	United States	HI	PJ	.64	.89	1.85
Erdogan (2002), Sample 1	261	United States	HI	IJ	.74	.96	1.69
Erdogan (2002), Sample 2	181	United States	HI	LMX		.94	1.59
Erdogan (2002), Sample 2	181	United States	HI	TP	.40	.92	0.81
Erdogan (2002), Sample 2	181	United States	HI	OCB	.45	.91	1.64
Erdogan (2002), Sample 2	181	United States	HI	DJ	.57	.96	1.61
Erdogan (2002), Sample 2	181	United States	HI	PJ	.53	.92	1.51
Erdogan (2002), Sample 2	181	United States	HI	IJ	.80	.84	1.85
Erdogan (2002), Sample 2	181	United States	HI	JS	.34	.61	1.44
Erdogan (2002), Sample 2	181	United States	HI	TI	-.49	.95	2.50
Erdogan & Bauer (2010)	276	Turkey	VC	LMX		.93	1.66
Erdogan & Bauer (2010)	276	Turkey	VC	OCB	.28	.88	0.96
Erdogan & Bauer (2010)	276	Turkey	VC	DJ	.47	.84	1.96
Erdogan & Bauer (2010)	276	Turkey	VC	PJ	.66	.84	1.49
Erdogan & Bauer (2010)	276	Turkey	VC	AC	.40	.88	1.35
Erdogan & Bauer (2010)	276	Turkey	VC	JS	.37	.81	0.79
Erdogan & Enders (2007)	248	United States	HI	LMX		.95	1.59
Erdogan & Enders (2007)	248	United States	HI	TP	.14	.92	0.79
Erdogan & Enders (2007)	248	United States	HI	JS	.43	.89	2.31
Erdogan et al. (2004)	520	Turkey	VC	LMX		.94	1.59
Erdogan et al. (2004)	520	Turkey	VC	JS	.29	.83	1.64
Erdogan & Liden (2006)	100	Turkey	VC	LMX		.92	1.46
Erdogan & Liden (2006)	100	Turkey	VC	DJ	.32	.94	2.04
Erdogan & Liden (2006)	100	Turkey	VC	IJ	.76	.90	1.82
Erdogan et al. (2006)	263	Turkey	VC	LMX		.94	1.49
Erdogan et al. (2006)	263	Turkey	VC	DJ	.45	.87	2.66
Erdogan et al. (2006)	263	Turkey	VC	IJ	.77	.95	1.82
Erwing & Lee (2009)	183	United States	HI	LMX		.89	0.76
Erwing & Lee (2009)	183	United States	HI	TL	.77	.88	0.70
Fernandez & Vecchio (1997)	332	United States	HI	LMX		.93	0.74
Fernandez & Vecchio (1997)	332	United States	HI	TP	.26	.92	0.69
Foosiri (2002)	242	Thailand	VC	LMX		.83	0.61
Foosiri (2002)	242	Thailand	VC	AC	.20	.86 ^a	0.23
Foosiri (2002)	242	Thailand	VC	NC	.11	.81 ^a	0.40
Foosiri (2002)	242	Thailand	VC	CC	-.08	.72 ^a	0.31
Francis (2010)	158	United States	HI	LMX		.90 ^a	
Francis (2010)	158	United States	HI	TI	-.55	.86 ^a	
Gaa (2010)	78	United States	HI	LMX		.85	
Gaa (2010)	78	United States	HI	OCB	.42	.90	
Gandolfo (2006)	186	United States	HI	LMX		.92	1.31
Gandolfo (2006)	186	United States	HI	TP	.26	.90	0.26
Gandolfo (2006)	186	United States	HI	AC	.53	.87	0.66
Ghosh (2009)	166	United States	HI	LMX		.92	0.85
Ghosh (2009)	166	United States	HI	OCB	.07	.66	0.79
Ghosh (2009)	166	United States	HI	AC	.23	.83	0.94
Ghosh (2009)	166	United States	HI	JS	.18	.74	0.45
Ghosh (2009)	166	United States	HI	TI	-.12	.68	0.71

(Appendix continues)

Appendix (continued)

Study	N	Moderator coding		LMX/correlate			
		Country	HI/ VC	Variable	r	α	Var
Glibkowski (2009)	158	United States	HI	LMX		.86	0.71
Glibkowski (2009)	158	United States	HI	OCB	.20	.72	0.35
Goertzen (2003)	94	United States	HI	LMX		.94	1.37
Goertzen (2003)	94	United States	HI	LT	.15	.76	0.22
Golden (2006)	294	United States	HI	LMX		.86	0.58
Golden (2006)	294	United States	HI	JS	.36	.88	1.21
Gómez & Rosen (2001)	128	United States	HI	LMX		.90	0.61
Gómez & Rosen (2001)	128	United States	HI	LT	.47	.93	0.37
Graen et al. (1973), Sample 1	202	United States	HI	LMX		.90 ^a	
Graen et al. (1973), Sample 1	202	United States	HI	TP	.40	.79	
Graen et al. (1973), Sample 1	202	United States	HI	JS	.58	.80	
Graen et al. (1973), Sample 2	340	United States	HI	LMX		.90 ^a	
Graen et al. (1973), Sample 2	340	United States	HI	TP	.43	.79	
Graen et al. (1973), Sample 2	340	United States	HI	JS	.47	.80	
Green et al. (1996)	208	United States	HI	LMX		.89	0.62
Green et al. (1996)	208	United States	HI	AC	.45	.91	0.83
Green et al. (1983)	104	United States	HI	LMX		.84	
Green et al. (1983)	104	United States	HI	TP	−.04	.96	
Green et al. (1983)	104	United States	HI	JS	.53	.78	
Green et al. (1983)	104	United States	HI	AC	.43	.86	
Greenwood (2000)	78	United States	HI	LMX		.93	0.76
Greenwood (2000)	78	United States	HI	TP	.16	.89	0.81
Greenwood (2000)	78	United States	HI	OCB	.35	.61	1.99
Greguras & Ford (2006)	422	United States	HI	LMX		.90	0.36
Greguras & Ford (2006)	422	United States	HI	TP	.19	.68	0.58
Greguras & Ford (2006)	422	United States	HI	OCB	.22	.94	0.71
Greguras & Ford (2006)	422	United States	HI	AC	.53	.83	0.64
Grosvenor (2005)	318	Canada	HI	LMX		.91	0.67
Grosvenor (2005)	318	Canada	HI	TL	.84	.91	0.56
Grosvenor (2005)	318	Canada	HI	LT	.70	.67	0.56
Gupta & Krishnan (2004)	102	India	VC	LMX		.78	0.53
Gupta & Krishnan (2004)	102	India	VC	TL	.02	.78	0.07
Gutknecht (2004), Sample 1	130	Switzerland	HI	LMX		.91	
Gutknecht (2004), Sample 1	130	Switzerland	HI	JS	.56	.78	
Gutknecht (2004), Sample 1	130	Switzerland	HI	TI	−.41	.78	
Gutknecht (2004), Sample 2	483	Switzerland	HI	LMX		.93	
Gutknecht (2004), Sample 2	483	Switzerland	HI	JS	.42	.76	
Gutknecht (2004), Sample 2	483	Switzerland	HI	TI	−.34	.79	
Hansen (2010), Sample 1	201	United States	HI	LMX		.89	1.30
Hansen (2010), Sample 1	201	United States	HI	AC	.68	.91	0.74
Hansen (2010), Sample 1	201	United States	HI	LT	.69	.81	0.55
Hansen (2010), Sample 2	58	United States	HI	LMX		.83	1.10
Hansen (2010), Sample 2	58	United States	HI	TP	.24	.85	0.18
Hansen (2010), Sample 2	58	United States	HI	OCB	.06	.84	0.27
Harris (2004), Sample 1	466	United States	HI	LMX		.93	0.72
Harris (2004), Sample 1	466	United States	HI	JS	.39	.71	0.38
Harris (2004), Sample 2	418	United States	HI	LMX		.90	0.98
Harris (2004), Sample 2	418	United States	HI	JS	.43	.68	0.61
Harris et al. (2007)	136	United States	HI	LMX		.89	1.19
Harris et al. (2007)	136	United States	HI	JS	.23	.88	1.17
Harris & Kacmar (2006), Sample 1	120	United States	HI	LMX		.89	0.67
Harris & Kacmar (2006), Sample 1	120	United States	HI	JS	.15	.88	0.83
Harris & Kacmar (2006), Sample 2	418	United States	HI	LMX		.90	0.98
Harris & Kacmar (2006), Sample 2	418	United States	HI	JS	.42	.68	0.98
Harris & Kacmar (2005)	1,255	United States	HI	LMX		.93	0.98
Harris & Kacmar (2005)	1,255	United States	HI	TP	.15	.81	0.24
Harris et al. (2005), Sample 1	402	United States	HI	LMX		.90	0.96
Harris et al. (2005), Sample 1	402	United States	HI	JS	.42	.73	0.61
Harris et al. (2005), Sample 1	402	United States	HI	TI	−.39	.85	2.28
Harris et al. (2005), Sample 2	183	United States	HI	LMX		.88	1.99

(Appendix continues)

Appendix (continued)

Study	N	Moderator coding		Variable	LMX/correlate		
		Country	HI/ VC		r	α	Var
Harris et al. (2005), Sample 2	183	United States	HI	JS	.55	.73	0.61
Harris et al. (2005), Sample 2	183	United States	HI	TI	-.25	.86 ^a	4.20
Harris et al. (2009), Sample 1	244	United States	HI	LMX		.94	0.77
Harris et al. (2009), Sample 1	244	United States	HI	JS	.40	.89	0.55
Harris et al. (2009), Sample 1	244	United States	HI	TI	-.28	.92	1.56
Harris et al. (2009), Sample 2	158	United States	HI	LMX		.92	0.38
Harris et al. (2009), Sample 2	158	United States	HI	TP	.15	.71	0.37
Harris et al. (2009), Sample 2	158	United States	HI	OCB	.12	.81	0.56
Heck et al. (2005)	312	United States	HI	LMX		.90	0.60
Heck et al. (2005)	312	United States	HI	DJ	.66	.94	0.98
Heck et al. (2005)	312	United States	HI	PJ	.81	.88	0.50
Heck et al. (2005)	312	United States	HI	AC	.61	.80	0.52
Heck et al. (2005)	312	United States	HI	JS	.64	.80	0.50
Henderson (2009)	245	United States	HI	LMX		.94	1.25
Henderson (2009)	245	United States	HI	AC	.24	.92	1.14
Henderson (2009)	245	United States	HI	JS	.30	.81	0.98
Henderson et al. (2008)	278	United States	HI	LMX		.89	2.07
Henderson et al. (2008)	278	United States	HI	TP	.29	.90	1.72
Hepperlen (2002)	196	United States	HI	LMX		.94	1.83
Hepperlen (2002)	196	United States	HI	TP	.23	.92	0.81
Hepperlen (2002)	196	United States	HI	OCB	.22	.93	1.21
Hepperlen (2002)	196	United States	HI	JS	.36	.89	0.37
Hepperlen (2002)	196	United States	HI	TI	-.29	.86	3.61
Hochwarter (2003)	131	United States	HI	LMX		.90 ^a	0.64
Hochwarter (2003)	131	United States	HI	JS	.33	.74	0.71
Hochwarter (2003)	131	United States	HI	AC	.53	.74	0.52
Hofmann et al. (2003)	127	United States	HI	LMX		.94	0.72
Hofmann et al. (2003)	127	United States	HI	OCB	.40	.96	0.72
Holcomb (2009)	163	United States	HI	LMX		.90	
Holcomb (2009)	163	United States	HI	AC	.35	.89	
Holcomb (2009)	163	United States	HI	NC	.37	.85	
Holcomb (2009)	163	United States	HI	CC	.06	.77	
Hoover (2009), Sample 1	230	United States	HI	LMX		.90	0.69
Hoover (2009), Sample 1	230	United States	HI	JS	.45	.90	1.06
Hoover (2009), Sample 1	230	United States	HI	AC	.39	.86	0.50
Hoover (2009), Sample 2	100	United States	HI	LMX		.90	0.69
Hoover (2009), Sample 2	100	United States	HI	TP	.06	.91	0.59
Hoover (2009), Sample 2	100	United States	HI	OCB	.16	.75	0.59
Howell & Hall-Merenda (1999)	317	Canada	HI	LMX		.80	0.45
Howell & Hall-Merenda (1999)	317	Canada	HI	TP	.24	.89 ^a	0.18
Howell & Hall-Merenda (1999)	317	Canada	HI	TL	.53	.89	0.59
Hrivnak (2009)	114	United States	HI	LMX		.88	0.44
Hrivnak (2009)	114	United States	HI	TP	.20	.95	0.61
Hrivnak (2009)	114	United States	HI	OCB	.19	.92	0.96
Hrivnak (2009)	114	United States	HI	JS	.48	.92	1.72
Hsiung & Tsai (2009)	184	Taiwan	VC	LMX		.84	0.31
Hsiung & Tsai (2009)	184	Taiwan	VC	TP	.29	.96	0.67
Hu et al. (2010)	215	India	VC	LMX		.91	1.06
Hu et al. (2010)	215	India	VC	OCB	.19	.82	0.88
Hui et al. (1999)	386	China	VC	LMX		.73	
Hui et al. (1999)	386	China	VC	TP	.11	.75	
Hui et al. (1999)	386	China	VC	OCB	.21	.86 ^a	
Hui et al. (2004)	605	China	VC	LMX		.86	1.00
Hui et al. (2004)	605	China	VC	OCB	.20	.85	0.28
Hui et al. (2004)	605	China	VC	PJ	.50	.92	1.64
Hui et al. (2004)	605	China	VC	AC	.53	.92	1.25
Hutchison et al. (1998)	91	United States	HI	LMX		.92	0.86
Hutchison et al. (1998)	91	United States	HI	AC	.54	.93	0.86
Ishak & Alam (2009)	300	Malaysia	VC	LMX		.94	1.30
Ishak & Alam (2009)	300	Malaysia	VC	TP	.17	.90	0.71

(Appendix continues)

Appendix (*continued*)

Study	N	Moderator coding		LMX/correlate			
		Country	HI/ VC	Variable	r	α	Var
Ishak & Alam (2009)	300	Malaysia	VC	OCB	.18	.74	1.03
Iyengar (2007)	105	United States	HI	LMX		.83	
Iyengar (2007)	105	United States	HI	JS	.54	.83	
Janssen & Van Yperen (2004)	170	Netherlands	HI	LMX		.93	0.79
Janssen & Van Yperen (2004)	170	Netherlands	HI	TP	.34	.85	0.77
Janssen & Van Yperen (2004)	170	Netherlands	HI	JS	.37	.88	1.23
Jenkins (2010)	160	United States	HI	LMX		.94	0.94
Jenkins (2010)	160	United States	HI	OCB	.37	.66	0.81
Jenkins (2010)	160	United States	HI	TL	.63	.97	1.06
Jiao (2007)	170	China	VC	LMX		.91	0.52
Jiao (2007)	170	China	VC	OCB	.33	.94	0.22
J. O. Johnson (2009), Sample 1	32	United States	HI	LMX		.90 ^a	
J. O. Johnson (2009), Sample 1	32	United States	HI	JS	.68	.84 ^a	
J. O. Johnson (2009), Sample 2	184	United States	HI	LMX		.94	1.17
J. O. Johnson (2009), Sample 2	184	United States	HI	JS	.68	.92	0.61
J. Johnson et al. (2009)	245	United States	HI	LMX		.95	
J. Johnson et al. (2009)	245	United States	HI	TP	.32	.89	0.24
J. Johnson et al. (2009)	245	United States	HI	OCB	.36	.56	0.38
Jones et al. (1993)	113	United States	HI	LMX		.90	0.64
Jones et al. (1993)	113	United States	HI	JS	.47	.67	1.00
Jones et al. (1993)	113	United States	HI	AC	.50	.85	0.49
Jones et al. (1993)	113	United States	HI	TI	-.21	.86 ^a	1.69
Joo (2010)	516	South Korea	VC	LMX		.87	0.37
Joo (2010)	516	South Korea	VC	AC	.52	.86	0.53
Joo (2010)	516	South Korea	VC	TI	-.32	.87	0.88
Judge & Ferris (1993)	81	United States	HI	LMX		.83	0.72
Judge & Ferris (1993)	81	United States	HI	TP	.27	.67	0.45
Kacmar et al. (1999)	196	United States	HI	LMX		.92	1.04
Kacmar et al. (1999)	196	United States	HI	DJ	.45	.94	0.81
Kacmar et al. (1999)	196	United States	HI	JS	.36	.87	0.50
Kacmar et al. (1999)	196	United States	HI	AC	.41	.87	0.41
Kacmar et al. (1999)	196	United States	HI	TI	-.30	.86	0.96
Kacmar et al. (2003), Sample 1	188	United States	HI	LMX		.87	2.25
Kacmar et al. (2003), Sample 1	188	United States	HI	TP	.22	.91	0.81
Kacmar et al. (2003), Sample 2	153	United States	HI	LMX		.83	1.93
Kacmar et al. (2003), Sample 2	153	United States	HI	TP	.32	.91	1.00
Kamdar & Van Dyne (2007)	230	United States	HI	LMX		.91	1.61
Kamdar & Van Dyne (2007)	230	United States	HI	TP	.39	.91	1.96
Kamdar & Van Dyne (2007)	230	United States	HI	OCB	.42	.89	1.80
Kang (2004)	296	South Korea	VC	LMX		.85	0.29
Kang (2004)	296	South Korea	VC	DJ	.46	.84	0.42
Kang (2004)	296	South Korea	VC	PJ	.38	.87	0.42
Kang (2004)	296	South Korea	VC	IJ	.70	.90	0.62
Karriker & Williams (2009)	217	United States	HI	LMX		.90	0.59
Karriker & Williams (2009)	217	United States	HI	OCB	.34	.68	0.40
Karriker & Williams (2009)	217	United States	HI	DJ	.49	.68	0.97
Karriker & Williams (2009)	217	United States	HI	PJ	.58	.68	0.80
Karriker & Williams (2009)	217	United States	HI	IJ	.59	.92	0.59
Karriker & Williams (2009)	217	United States	HI	AC	.48	.93	0.72
Keller & Dansereau (1995)	92	United States	HI	LMX		.69	0.26
Keller & Dansereau (1995)	92	United States	HI	TP	.33	.92	0.61
Keller & Dansereau (1995)	92	United States	HI	IJ	.65	.93	0.77
Keller & Dansereau (2001)	138	United States	HI	LMX		.80	
Keller & Dansereau (2001)	138	United States	HI	TP	.27	.89	
Kent & Chelladurai (2001)	75	United States	HI	LMX		.91	0.52
Kent & Chelladurai (2001)	75	United States	HI	AC	.29	.80	0.71
Kent & Chelladurai (2001)	75	United States	HI	NC	.33	.82	0.96
B. Kim et al. (2010), Sample 1	88	South Korea	VC	LMX		.83	0.64
B. Kim et al. (2010), Sample 1	88	South Korea	VC	TI	-.25	.87	1.66
B. Kim et al. (2010), Sample 2	232	South Korea	VC	LMX		.83	0.71

(Appendix continues)

Appendix (continued)

Study	N	Moderator coding		LMX/correlate			
		Country	HI/ VC	Variable	r	α	Var
B. Kim et al. (2010), Sample 2	232	South Korea	VC	TI	.07	.87	1.61
S. K. Kim (2006)	238	United States	HI	LMX		.97	3.86
S. K. Kim (2006)	238	United States	HI	OCB	.86	.96	3.31
Kinicki & Vecchio (1994)	138	United States	HI	LMX		.89	0.44
Kinicki & Vecchio (1994)	138	United States	HI	AC	.31	.91	0.52
Klein & Kim (1998)	59	United States	HI	LMX		.91	0.61
Klein & Kim (1998)	59	United States	HI	TP	.28	.83	
Ko (2005)	990	South Korea	VC	LMX		.93	0.29
Ko (2005)	990	South Korea	VC	TL	.67	.92	0.13
Kraimer et al. (2011)	198	United States	HI	LMX		.94	1.32
Kraimer et al. (2011)	198	United States	HI	TP	.38	.82	0.48
Kraimer et al. (2011)	198	United States	HI	AC	.29	.86	1.23
Kraimer et al. (2011)	198	United States	HI	JS	.46	.84	1.30
Kraimer & Wayne (2004)	230	United States	HI	LMX		.93	0.90
Kraimer & Wayne (2004)	230	United States	HI	TP	.21	.86	0.61
Kraimer & Wayne (2004)	230	United States	HI	OCB	.22	.84	0.74
Kraimer & Wayne (2004)	230	United States	HI	AC	.22	.89	0.98
Kraus (1999)	134	United States	HI	LMX		.89	0.72
Kraus (1999)	134	United States	HI	JS	.46	.88	0.76
Kraus (2002)	12	United States	HI	LMX		.90	0.61
Kraus (2002)	12	United States	HI	TP	.26	.99	0.96
Kraus (2002)	12	United States	HI	OCB	.27	.96	1.30
Krishnan (2004)	281	India	VC	LMX		.77	0.35
Krishnan (2004)	281	India	VC	TL	.62	.88	0.52
Krishnan (2005)	100	United States	HI	LMX		.89	0.49
Krishnan (2005)	100	United States	HI	TI	-.50	.85	1.49
Krishnan (2005)	100	United States	HI	TL	.08	.98	0.81
T. Lam (2003)	417	China	VC	LMX		.88	0.49
T. Lam (2003)	417	China	VC	JS	.49	.84 ^a	2.99
T. Lam (2003)	417	China	VC	AC	.52	.86	0.59
T. Lam (2003)	417	China	VC	TI	-.32	.84	5.11
W. Lam et al. (2007)	240	China	VC	LMX		.81	0.24
W. Lam et al. (2007)	240	China	VC	TP	.54	.87 ^a	
Law & Wong (1999)	224	China	VC	LMX		.86	0.52
Law & Wong (1999)	224	China	VC	JS	.37	.88	0.72
Law & Wong (1999)	224	China	VC	TI	-.27	.81	1.00
Law et al. (2000)	189	China	VC	LMX		.87	1.59
Law et al. (2000)	189	China	VC	TP	.37	.91	1.20
H. R. Lee (2000)	250	United States	HI	LMX		.93	2.15
H. R. Lee (2000)	250	United States	HI	DJ	.86	.96	3.13
H. R. Lee (2000)	250	United States	HI	PJ	.90	.98	2.56
H. R. Lee (2000)	250	United States	HI	JS	.81	.95	1.90
H. R. Lee (2000)	250	United States	HI	AC	.56	.96	2.28
H. R. Lee (2000)	250	United States	HI	TI	-.39	.90	3.76
H. R. Lee et al. (2010)	250	United States	HI	LMX		.91	2.15
H. R. Lee et al. (2010)	250	United States	HI	DJ	.86	.96	3.14
H. R. Lee et al. (2010)	250	United States	HI	PJ	.90	.96	2.58
H. R. Lee et al. (2010)	250	United States	HI	TI	-.39	.91	3.77
J. Lee (2001)	280	United States	HI	LMX		.88	0.62
J. Lee (2001)	280	United States	HI	DJ	.29	.80	1.46
J. Lee (2001)	280	United States	HI	PJ	.68	.95	1.46
J. Lee (2005)	201	Singapore	VC	LMX		.90	2.02
J. Lee (2005)	201	Singapore	VC	AC	.61	.89	1.17
J. Lee (2005)	201	Singapore	VC	NC	.52	.85	1.42
J. Lee (2005)	201	Singapore	VC	TL	.68	.93	0.50
M. Lee & Son (1999)	137	South Korea	VC	LMX		.92	1.23
M. Lee & Son (1999)	137	South Korea	VC	TP	.24	.93	0.21
Li et al. (2010)	200	China	VC	LMX		.85	0.83
Li et al. (2010)	200	China	VC	OCB	.26	.90	0.35
Li et al. (2010)	200	China	VC	PJ	.35	.76	0.41

(Appendix continues)

Appendix (*continued*)

Study	N	Moderator coding		Variable	LMX/correlate		
		Country	HI/ VC		r	α	Var
Li et al. (2010)	200	China	VC	JS	.51	.83	1.30
H. Liao et al. (2010)	828	China	VC	LMX		.89	1.14
H. Liao et al. (2010)	828	China	VC	TP	.25	.87 ^a	
S.-H. Liao et al. (2009)	303	Taiwan	VC	LMX		.86	0.30
S.-H. Liao et al. (2009)	303	Taiwan	VC	AC	.45	.84	0.41
S.-H. Liao et al. (2009)	303	Taiwan	VC	NC	.29	.66	0.48
S.-H. Liao et al. (2009)	303	Taiwan	VC	CC	.14	.69	0.56
S.-H. Liao et al. (2009)	303	Taiwan	VC	JS	.46	.72	0.54
Liden et al. (2006)	834	United States	HI	LMX		.96	1.35
Liden et al. (2006)	834	United States	HI	TP	.23	.92	
Liden et al. (2000)	337	United States	HI	LMX		.96	1.30
Liden et al. (2000)	337	United States	HI	TP	.12	.90	1.17
Liden et al. (2000)	337	United States	HI	JS	.30	.81	0.36
Liden et al. (2000)	337	United States	HI	AC	.36	.90	1.17
Liden et al. (1993)	166	United States	HI	LMX		.80	0.93
Liden et al. (1993)	166	United States	HI	TP	.24	.93	1.04
Lindsay (2008)	418	United States	HI	LMX		.88	0.53
Lindsay (2008)	418	United States	HI	OCB	.33	.92	0.67
Lindsay (2008)	418	United States	HI	AC	.20	.86	0.66
Lindsay (2008)	418	United States	HI	NC	.17	.82	0.59
Lindsay (2008)	418	United States	HI	CC	.08	.69	0.56
Lindsay (2008)	418	United States	HI	JS	.25	.87	0.38
Lindsay (2008)	418	United States	HI	TI	-.18	.71	0.66
Lippstreu (2010)	263	United States	HI	LMX		.90	0.50
Lippstreu (2010)	263	United States	HI	TL	.71	.94	0.42
Lo et al. (2010)	156	Malaysia	VC	LMX		.88	1.10
Lo et al. (2010)	156	Malaysia	VC	AC	.63	.93	1.51
Lo et al. (2010)	156	Malaysia	VC	NC	.79	.90	1.00
Lo et al. (2010)	156	Malaysia	VC	CC	.36	.67	1.02
Lo et al. (2010)	156	Malaysia	VC	TL	.80	.84	1.14
Loi & Ngo (2009)	239	China	VC	LMX		.87	0.96
Loi & Ngo (2009)	239	China	VC	TP	.01	.78	0.46
Loi & Ngo (2009)	239	China	VC	OCB	-.06	.82	0.62
Loi et al. (2009)	239	China	VC	LMX		.87	0.96
Loi et al. (2009)	239	China	VC	AC	.57	.84	0.98
Loi et al. (2009)	239	China	VC	TI	-.31	.90	1.90
Major et al. (1995)	248	United States	HI	LMX		.83	0.28
Major et al. (1995)	248	United States	HI	JS	.48	.90	0.29
Major et al. (1995)	248	United States	HI	AC	.48	.87	0.56
Major et al. (1995)	248	United States	HI	TI	-.25	.90	1.72
Manogran et al. (1994)	282	United States	HI	LMX		.91	0.50
Manogran et al. (1994)	282	United States	HI	OCB	.17	.93	1.12
Manogran et al. (1994)	282	United States	HI	DJ	.48	.89	1.02
Manogran et al. (1994)	282	United States	HI	PJ	.28	.81	0.79
Manogran et al. (1994)	282	United States	HI	IJ	.76	.91	1.06
Manogran et al. (1994)	282	United States	HI	JS	.61	.91	0.45
Manogran et al. (1994)	282	United States	HI	AC	.33	.91	1.66
Markham et al. (2010)	82	United States	HI	LMX		.91	1.30
Markham et al. (2010)	82	United States	HI	TP	.11	.92	0.74
Martin (1999)	522	United States	HI	LMX		.95	1.93
Martin (1999)	522	United States	HI	LT	.26	.72	0.67
Maslyn & Fedor (1998)	513	United States	HI	LMX		.92	0.59
Maslyn & Fedor (1998)	513	United States	HI	OCB	.24	.73	0.46
Maslyn & Fedor (1998)	513	United States	HI	AC	.42	.89	2.46
Maslyn & Fedor (1998)	513	United States	HI	TI	-.52	.87	4.49
Masterson et al. (2000)	651	United States	HI	LMX		.89	0.74
Masterson et al. (2000)	651	United States	HI	TP	.16	.89 ^a	0.61
Masterson et al. (2000)	651	United States	HI	OCB	.27	.78	0.24
Masterson et al. (2000)	651	United States	HI	IJ	.67	.94	

(Appendix continues)

Appendix (continued)

Study	N	Moderator coding		Variable	LMX/correlate		
		Country	HI/ VC		r	α	Var
Masterson et al. (2000)	651	United States	HI	JS	.48	.84 ^a	0.72
Masterson et al. (2000)	651	United States	HI	AC	.37	.74	0.64
Masterson et al. (2000)	651	United States	HI	TI	-.24	.77	0.98
Mehta (2009)	330	India	VC	LMX		.89	0.18
Mehta (2009)	330	India	VC	AC	.24	.87	0.81
Mehta (2009)	330	India	VC	TI	-.02	.89	1.04
Mendez (1999)	200	United States	HI	LMX		.93	0.74
Mendez (1999)	200	United States	HI	TI	-.09	.74	3.96
Morrow et al. (2005)	207	United States	HI	LMX		.94	0.76
Morrow et al. (2005)	207	United States	HI	AC	.46	.74	0.96
S. E. Murphy & Ensher (1999)	54	United States	HI	LMX		.91	0.60
S. E. Murphy & Ensher (1999)	54	United States	HI	TP	.37	.93	0.54
S. E. Murphy & Ensher (1999)	54	United States	HI	JS	.37	.80	0.41
S. M. Murphy (1997)	156	United States	HI	LMX		.88	0.74
S. M. Murphy (1997)	156	United States	HI	TP	.16	.88	0.88
S. M. Murphy (1997)	156	United States	HI	OCB	.47	.89	0.86
S. M. Murphy (1997)	156	United States	HI	DJ	.31	.94	2.04
S. M. Murphy (1997)	156	United States	HI	PJ	.51	.86	1.64
S. M. Murphy (1997)	156	United States	HI	IJ	.57	.96	1.80
S. M. Murphy et al. (2003)	124	United States	HI	LMX		.86	0.81
S. M. Murphy et al. (2003)	124	United States	HI	DJ	.37	.93	0.81
S. M. Murphy et al. (2003)	124	United States	HI	IJ	.64	.96	1.66
Nahrgang et al. (2009)	330	United States	HI	LMX		.92	0.30
Nahrgang et al. (2009)	330	United States	HI	TP	.29	.93	
Nathan et al. (1991)	292	United States	HI	LMX		.92	1.69
Nathan et al. (1991)	292	United States	HI	TP	.18	.89 ^a	1.54
Nathan et al. (1991)	292	United States	HI	JS	.21	.84 ^a	1.66
Novak (1984)	296	United States	HI	LMX		.86	0.73
Novak (1984)	296	United States	HI	LT	.78	.96	0.77
Nystrom (1990)	171	United States	HI	LMX		.79	0.36
Nystrom (1990)	171	United States	HI	AC	.49	.90	1.21
O'Donnell (2009), Sample 1	248	United States	HI	LMX		.87	0.56
O'Donnell (2009), Sample 1	248	United States	HI	TL	.62	.89	1.33
O'Donnell (2009), Sample 2	271	United States	HI	LMX		.95	1.74
O'Donnell (2009), Sample 2	271	United States	HI	TL	.67	.94	1.38
O'Driscoll & Beehr (1994)	136	New Zealand	HI	LMX		.94	0.67
O'Driscoll & Beehr (1994)	136	New Zealand	HI	JS	.43	.86	0.61
O'Driscoll & Beehr (1994)	136	New Zealand	HI	TI	-.34	.93	2.28
Paglis & Green (2002)	127	United States	HI	LMX		.92	0.90
Paglis & Green (2002)	127	United States	HI	TP	.08	.92	0.59
Paglis & Green (2002)	127	United States	HI	OCB	.21	.87	0.62
Palacios (2010)	99	United States	HI	LMX		.93	1.34
Palacios (2010)	99	United States	HI	JS	.25	.88	0.59
Pelled & Xin (2000), Sample 1	90	United States	HI	LMX		.89	0.56
Pelled & Xin (2000), Sample 1	90	United States	HI	TP	.13	.88	0.41
Pelled & Xin (2000), Sample 1	90	United States	HI	LT	.49	.78	2.37
Pelled & Xin (2000), Sample 2	195	Mexico	VC	LMX		.78	0.56
Pelled & Xin (2000), Sample 2	195	Mexico	VC	TP	.22	.74	0.49
Pelled & Xin (2000), Sample 2	195	Mexico	VC	LT	.42	.61	1.88
Pellegrini & Scandura (2006)	172	Turkey	VC	LMX		.90	1.05
Pellegrini & Scandura (2006)	172	Turkey	VC	JS	.39	.86	0.86
Pellegrini et al. (2010)	215	United States	HI	LMX		.93	1.59
Pellegrini et al. (2010)	207	India	VC	LMX		.94	1.69
Pellegrini et al. (2010)	207	India	VC	AC	.44	.70	0.23
Pellegrini et al. (2010)	215	United States	HI	AC	.48	.83	0.67
Pellegrini et al. (2010)	207	India	VC	JS	.53	.92	0.28
Pellegrini et al. (2010)	215	United States	HI	JS	.59	.87	0.40
Perizade & Sulaiman (2005)	613	Indonesia	VC	LMX		.87	0.89
Perizade & Sulaiman (2005)	613	Indonesia	VC	AC	.43	.89	1.10

(Appendix continues)

Appendix (continued)

Study	N	Moderator coding		LMX/correlate			
		Country	HI/ VC	Variable	r	α	Var
Phillips & Bedeian (1994)	84	United States	HI	LMX		.87	0.40
Phillips & Bedeian (1994)	84	United States	HI	TP	.26	.91	1.46
Piccolo & Colquitt (2006)	283	United States	HI	LMX		.93	0.88
Piccolo & Colquitt (2006)	283	United States	HI	TP	.31	.93	0.32
Piccolo & Colquitt (2006)	283	United States	HI	OCB	.38	.94	0.41
Piccolo & Colquitt (2006)	283	United States	HI	TL	.70	.96	0.76
Pierce (2001), Sample 1	177	United States	HI	LMX		.95	
Pierce (2001), Sample 1	177	United States	HI	OCB	.36	.80	
Pierce (2001), Sample 2	298	United States	HI	LMX		.98	
Pierce (2001), Sample 2	298	United States	HI	OCB	.31	.91	
Pillai et al. (1999), Sample 1	80	India	VC	LMX		.81	0.32
Pillai et al. (1999), Sample 1	80	India	VC	DJ	.26	.81	0.55
Pillai et al. (1999), Sample 1	80	India	VC	PJ	.40	.76	0.46
Pillai et al. (1999), Sample 1	80	India	VC	JS	.58	.85	0.27
Pillai et al. (1999), Sample 1	80	India	VC	TL	.59	.92	0.55
Pillai et al. (1999), Sample 2	190	Saudi Arabia/Jordan	VC	LMX		.84	0.45
Pillai et al. (1999), Sample 2	190	Saudi Arabia/Jordan	VC	DJ	.32	.72	0.59
Pillai et al. (1999), Sample 2	190	Saudi Arabia/Jordan	VC	PJ	.41	.76	0.50
Pillai et al. (1999), Sample 2	190	Saudi Arabia/Jordan	VC	JS	.43	.79	0.21
Pillai et al. (1999), Sample 2	190	Saudi Arabia/Jordan	VC	TL	.24	.87	0.69
Pillai et al. (1999), Sample 3	85	Colombia	VC	LMX		.86	0.44
Pillai et al. (1999), Sample 3	85	Colombia	VC	DJ	.40	.78	0.58
Pillai et al. (1999), Sample 3	85	Colombia	VC	PJ	.57	.89	0.74
Pillai et al. (1999), Sample 3	85	Colombia	VC	JS	.51	.80	0.26
Pillai et al. (1999), Sample 3	85	Colombia	VC	TL	.59	.78	0.66
Pillai et al. (1999), Sample 4	240	United States	HI	LMX		.89	0.50
Pillai et al. (1999), Sample 4	240	United States	HI	DJ	.29	.83	0.62
Pillai et al. (1999), Sample 4	240	United States	HI	PJ	.64	.88	0.76
Pillai et al. (1999), Sample 4	240	United States	HI	JS	.69	.87	0.48
Pillai et al. (1999), Sample 4	240	United States	HI	TL	.75	.94	0.88
Pillai et al. (1999), Sample 5	160	Australia	HI	LMX		.90	0.50
Pillai et al. (1999), Sample 5	160	Australia	HI	DJ	.38	.85	0.59
Pillai et al. (1999), Sample 5	160	Australia	HI	PJ	.64	.88	0.69
Pillai et al. (1999), Sample 5	160	Australia	HI	JS	.50	.77	0.45
Pillai et al. (1999), Sample 5	160	Australia	HI	TL	.69	.89	0.94
Polly (2002)	348	United States	HI	LMX		.92	0.49
Polly (2002)	348	United States	HI	AC	.35	.82	0.52
Rahn (2010)	210	United States	HI	LMX		.91	0.32
Rahn (2010)	210	United States	HI	AC	.49	.64	0.53
Rahn (2010)	210	United States	HI	TI	-.45	.92	1.44
Rahn (2010)	210	United States	HI	TL	.35	.95	0.61
Ren (2007), Sample 1	173	China	VC	LMX		.82	1.14
Ren (2007), Sample 1	173	China	VC	DJ	.29	.95	2.16
Ren (2007), Sample 1	173	China	VC	PJ	.43	.88	1.49
Ren (2007), Sample 1	173	China	VC	IJ	.49	.82	1.10
Ren (2007), Sample 1	173	China	VC	AC	.48	.72	0.94
Ren (2007), Sample 1	173	China	VC	NC	.49	.78	1.08
Ren (2007), Sample 1	173	China	VC	CC	.05	.79	0.86
Ren (2007), Sample 1	173	China	VC	JS	.47	.73	1.00
Ren (2007), Sample 1	173	China	VC	LT	.53	.63	0.45
Ren (2007), Sample 2	263	United States	HI	LMX		.89	0.52
Ren (2007), Sample 2	263	United States	HI	DJ	.24	.95	0.76
Ren (2007), Sample 2	263	United States	HI	PJ	.42	.85	0.35
Ren (2007), Sample 2	263	United States	HI	IJ	.62	.90	0.64
Ren (2007), Sample 2	263	United States	HI	AC	.47	.83	1.28
Ren (2007), Sample 2	263	United States	HI	NC	.33	.85	1.32
Ren (2007), Sample 2	263	United States	HI	CC	.04	.88	1.14
Ren (2007), Sample 2	263	United States	HI	JS	.42	.89	1.25

(Appendix continues)

Appendix (continued)

Study	N	Moderator coding		Variable	LMX/correlate		
		Country	HI/ VC		r	α	Var
Ren (2007), Sample 2	263	United States	HI	LT	.63	.79	0.28
Richins (2003)	330	United States	HI	LMX		.86	1.46
Richins (2003)	330	United States	HI	TP	.42	.89	0.81
Richins (2003)	330	United States	HI	OCB	.43	.93	1.12
Richins (2003)	330	United States	HI	AC	.46	.76	1.59
Richins (2003)	330	United States	HI	JS	.39	.83	1.96
Richins (2003)	330	United States	HI	TI	-.36	.81	2.31
Roch & Shanock (2006)	272	United States	HI	LMX		.88	0.58
Roch & Shanock (2006)	272	United States	HI	DJ	.42	.97	1.04
Roch & Shanock (2006)	272	United States	HI	PJ	.50	.89	0.61
Roch & Shanock (2006)	272	United States	HI	IJ	.78	.83	0.67
Sanchez (2002)	106	United States	HI	LMX		.88	0.44
Sanchez (2002)	106	United States	HI	TP	.43	.94	0.56
Sanchez (2002)	106	United States	HI	OCB	.34	.88	0.53
Sanchez (2002)	106	United States	HI	DJ	.36	.93	0.64
Sanchez (2002)	106	United States	HI	PJ	.30	.89	0.50
Sanchez (2002)	106	United States	HI	JS	.62	.80	0.66
Sanchez (2002)	106	United States	HI	AC	.41	.85	0.56
Sanchez (2002)	106	United States	HI	TI	-.36	.81	1.12
Sanchez (2002)	106	United States	HI	LT	.41	.91	0.58
Scandura et al. (1986)	58	United States	HI	LMX		.86	0.53
Scandura et al. (1986)	58	United States	HI	TP	.36	.88	0.41
Scandura & Pellegrini (2008)	228	United States	HI	LMX		.89	0.50
Scandura & Pellegrini (2008)	228	United States	HI	LT	.29	.91	0.90
Scandura & Schriesheim (1994)	183	United States	HI	LMX		.86	0.44
Scandura & Schriesheim (1994)	183	United States	HI	TP	.27	.93	0.88
Schaninger (2002)	210	United States	HI	LMX		.93	1.06
Schaninger (2002)	210	United States	HI	TP	.10	.90	0.56
Schaninger (2002)	210	United States	HI	OCB	.18	.89	0.74
Schaninger (2002)	210	United States	HI	JS	.44	.79	1.77
Schaninger (2002)	210	United States	HI	TI	-.37	.85	2.46
Schriesheim et al. (2000)	150	United States	HI	LMX		.86	0.64
Schriesheim et al. (2000)	150	United States	HI	TP	.23	.77	0.66
Schriesheim et al. (2000)	150	United States	HI	AC	.75	.85	0.37
Schriesheim et al. (1998)	106	United States	HI	LMX		.82	0.33
Schriesheim et al. (1998)	106	United States	HI	TP	.39	.84	0.27
Schriesheim et al. (1992), Sample 1	281	United States	HI	LMX		.81	0.35
Schriesheim et al. (1992), Sample 1	281	United States	HI	AC	.43	.91	
Schriesheim et al. (1992), Sample 1	281	United States	HI	JS	.63	.86	
Schriesheim et al. (1992), Sample 2	115	United States	HI	LMX		.80	0.43
Schriesheim et al. (1992), Sample 2	115	United States	HI	TP	.40	.80	
Schriesheim et al. (1992), Sample 2	115	United States	HI	JS	.43	.91	
Schyns et al. (2005), Sample 2	252	Germany	HI	LMX		.84	
Schyns et al. (2005), Sample 2	252	Germany	HI	AC	.63	.92	
Schyns et al. (2005), Sample 4	141	Germany	HI	LMX		.89	
Schyns et al. (2005), Sample 4	141	Germany	HI	AC	.44	.77	
Scott & Bruce (1994)	172	United States	HI	LMX		.90	0.44
Scott & Bruce (1994)	172	United States	HI	OCB	.17	.89	0.71
Seers (1989)	154	United States	HI	LMX		.92	0.86
Seers (1989)	154	United States	HI	TP	.48	.89 ^a	
Seers (1989)	154	United States	HI	JS	.37	.84 ^a	
Seers & Graen (1984)	101	United States	HI	LMX		.89	0.40
Seers & Graen (1984)	101	United States	HI	JS	.56	.85	
Sekiguchi et al. (2008)	125	United States	HI	LMX		.95	2.25
Sekiguchi et al. (2008)	125	United States	HI	TP	.44	.90	1.19
Sekiguchi et al. (2008)	125	United States	HI	OCB	.42	.83	1.17
Settoon et al. (1996)	102	United States	HI	LMX		.96	1.14
Settoon et al. (1996)	102	United States	HI	TP	.34	.89	0.31

(Appendix continues)

Appendix (continued)

Study	N	Moderator coding		LMX/correlate			
		Country	HI/ VC	Variable	r	α	Var
Settoon et al. (1996)	102	United States	HI	OCB	.42	.81	0.36
Settoon et al. (1996)	102	United States	HI	AC	.36	.84	0.30
Shalhoop (2004)	141	United States	HI	LMX		.92	1.72
Shalhoop (2004)	141	United States	HI	OCB	.28	.91	1.42
Shalhoop (2004)	141	United States	HI	DJ	.32	.91	1.30
Shalhoop (2004)	141	United States	HI	PJ	.40	.82	0.71
Shalhoop (2004)	141	United States	HI	IJ	.56	.92	1.10
Shalhoop (2004)	141	United States	HI	AC	.39	.84	1.42
Shalhoop (2004)	141	United States	HI	JS	.42	.84	1.77
Shalhoop (2004)	141	United States	HI	TI	-.30	.95	1.77
Shapiro et al. (2011)	162	United States	HI	LMX		.88	1.69
Shapiro et al. (2011)	162	United States	HI	TI	-.04	.89	3.13
Sherony (2002)	98	United States	HI	LMX		.96	1.70
Sherony (2002)	98	United States	HI	TP	.03	.89 ^a	
Shull (1994)	236	United States	HI	LMX		.80	0.52
Shull (1994)	236	United States	HI	TP	.23	.85	0.76
Shull (1994)	236	United States	HI	OCB	.21	.81	0.92
Shull (1994)	236	United States	HI	DJ	.34	.78	0.86
Shull (1994)	236	United States	HI	PJ	.47	.85	0.85
Shull (1994)	236	United States	HI	IJ	.49	.94	0.88
Sias (2005)	400	United States	HI	LMX		.93	0.63
Sias (2005)	400	United States	HI	JS	.49	.73	0.58
Sias (2005)	400	United States	HI	AC	.35	.91	0.46
Smith (2002)	150	United States	HI	LMX		.96	2.16
Smith (2002)	150	United States	HI	TP	.24	.80	0.94
Smith (2002)	150	United States	HI	AC	.40	.86	1.77
Smith (2002)	150	United States	HI	JS	.25	.90	1.32
Soldner & Crimando (2010)	41	United States	HI	LMX		.95	
Soldner & Crimando (2010)	41	United States	HI	OCB	.15	.72	
Soldner & Crimando (2010)	41	United States	HI	AC	.38	.86 ^a	
Sparrowe (1994)	182	United States	HI	LMX		.75	1.10
Sparrowe (1994)	182	United States	HI	TI	-.19	.85	2.82
Sparrowe et al. (2006)	177	United States	HI	LMX		.92	0.96
Sparrowe et al. (2006)	177	United States	HI	OCB	.16	.87	0.85
Stepina et al. (1991)	81	United States	HI	LMX		.73	0.37
Stepina et al. (1991)	81	United States	HI	TP	.28	.73	0.62
Stepina et al. (1991)	81	United States	HI	JS	.39	.71	1.88
Story (2010)	223	China	VC	LMX		.91	0.83
Story (2010)	223	China	VC	AC	.41	.81	0.55
Stringer (2006)	57	United States	HI	LMX		.90	0.52
Stringer (2006)	57	United States	HI	JS	.62	.93	0.86
Suazo (2002)	128	United States	HI	LMX		.90	0.69
Suazo (2002)	128	United States	HI	TP	.10	.85	0.58
Suazo (2002)	128	United States	HI	OCB	.22	.88	0.86
Tansky (1993)	75	United States	HI	LMX		.85	0.32
Tansky (1993)	75	United States	HI	OCB	.42	.86	0.41
Tansky (1993)	75	United States	HI	PJ	.52	.88	
Tansky (1993)	75	United States	HI	JS	.45	.88	0.27
Tansky (1993)	75	United States	HI	AC	.30	.85	0.23
Tekleab & Taylor (2003)	130	United States	HI	LMX		.89	0.72
Tekleab & Taylor (2003)	130	United States	HI	TP	.34	.70	0.66
Tekleab & Taylor (2003)	130	United States	HI	OCB	.52	.85	0.62
Tekleab & Taylor (2003)	130	United States	HI	JS	.45	.75	0.64
Tekleab & Taylor (2003)	130	United States	HI	TI	-.31	.85	1.12
Tepper et al. (2006), Sample 1	347	United States	HI	LMX		.74	
Tepper et al. (2006), Sample 1	347	United States	HI	TP	.30	.87	1.60
Tepper et al. (2006), Sample 2	207	United States	HI	LMX		.90 ^a	
Tepper et al. (2006), Sample 2	207	United States	HI	TP	.46	.88	0.46

(Appendix continues)

Appendix (continued)

Study	N	Moderator coding		LMX/correlate			
		Country	HI/ VC	Variable	r	α	Var
Tierney et al. (2002)	100	Mexico	VC	LMX		.89	1.06
Tierney et al. (2002)	100	Mexico	VC	OCB	.62	.91	0.81
Tierney et al. (2002)	100	Mexico	VC	JS	.52	.90	0.61
Tierney et al. (2002)	100	Mexico	VC	AC	.58	.89	0.72
Tierney et al. (1999)	159	United States	HI	LMX		.91	0.35
Tierney et al. (1999)	159	United States	HI	TP	.30	.95	1.21
Townsend et al. (2002)	420	United States	HI	LMX		.87	0.42
Townsend et al. (2002)	420	United States	HI	TP	.28	.89 ^a	0.64
Townsend et al. (2000)	150	United States	HI	LMX		.90	0.76
Townsend et al. (2000)	150	United States	HI	TP	.45	.75	0.76
Townsend et al. (2000)	150	United States	HI	OCB	.43	.88	0.69
Trepanier (2011)	324	Canada	HI	LMX		.94	0.61
Trepanier (2011)	324	Canada	HI	TP	.42	.83	0.28
Truckenbrodt (2000)	63	United States	HI	LMX		.87	0.36
Truckenbrodt (2000)	63	United States	HI	OCB	.28	.72	0.19
Truckenbrodt (2000)	63	United States	HI	AC	.35	.88	1.08
Uhl-Bien & Maslyn (2003)	232	United States	HI	LMX		.90	0.59
Uhl-Bien & Maslyn (2003)	232	United States	HI	TP	.36	.94	0.52
Uhl-Bien & Maslyn (2003)	232	United States	HI	OCB	.32	.91	0.62
Uhl-Bien & Maslyn (2003)	232	United States	HI	AC	.33	.87	0.66
van Breukelen et al. (2002)	152	Netherlands	HI	LMX		.90	0.46
van Breukelen et al. (2002)	152	Netherlands	HI	AC	.40	.74	0.64
Van Dyne et al. (2002)	195	United States	HI	LMX		.90	0.94
Van Dyne et al. (2002)	195	United States	HI	TP	.03	.89 ^a	
Van Dyne et al. (2002)	195	United States	HI	OCB	.37	.88	1.02
Van Dyne et al. (2008), Sample 1	218	India	VC	LMX		.91	1.25
Van Dyne et al. (2008), Sample 1	218	India	VC	OCB	.52	.91	1.38
Van Dyne et al. (2008), Sample 2	234	Singapore	VC	LMX		.93	1.06
Van Dyne et al. (2008), Sample 2	234	Singapore	VC	OCB	.34	.95	2.04
Vecchio (1985)	45	United States	HI	LMX		.64	0.20
Vecchio (1985)	45	United States	HI	JS	.32	.82	2.86
Vecchio (1987)	303	United States	HI	LMX		.91	0.43
Vecchio (1987)	303	United States	HI	TP	.35	.94	
Vecchio & Brazil (2007)	1,974	United States	HI	LMX		.90	0.53
Vecchio & Brazil (2007)	1,974	United States	HI	TP	.17	.94	1.56
Vecchio & Brazil (2007)	1,974	United States	HI	TI	-.34	.90	0.50
Vecchio et al. (2006)	860	United States	HI	LMX		.90	0.58
Vecchio et al. (2006)	860	United States	HI	TP	.29	.89	0.83
Vecchio & Gobdel (1984)	45	United States	HI	LMX		.64	0.20
Vecchio & Gobdel (1984)	45	United States	HI	TP	.27	.86	0.53
Vecchio & Gobdel (1984)	45	United States	HI	JS	.25	.82	
Vecchio & Gobdel (1984)	45	United States	HI	TI	-.20	.86 ^a	
Vecchio et al. (1986)	173	United States	HI	LMX		.82	0.29
Vecchio et al. (1986)	173	United States	HI	JS	.41	.68	
Vecchio & Norris (1996)	105	United States	HI	LMX		.80	0.69
Vecchio & Norris (1996)	105	United States	HI	TP	.37	.93	0.96
Venkataramani et al. (2010)	184	India	VC	LMX		.90	0.45
Venkataramani et al. (2010)	184	India	VC	JS	.36	.85	0.69
Venkataramani et al. (2010)	184	India	VC	TI	-.25	.78	0.71
Vidyarathi et al. (2010)	254	India	VC	LMX		.84	0.46
Vidyarathi et al. (2010)	254	India	VC	TP	.15	.80	0.48
Vidyarathi et al. (2010)	254	India	VC	OCB	.15	.86	0.34
Volmer et al. (2011)	279	Germany	HI	LMX		.86	0.52
Volmer et al. (2011)	279	Germany	HI	JS	.51	.84 ^a	0.96
Waismel-Manor et al. (2010)	163	Israel	HI	LMX		.89	0.41
Waismel-Manor et al. (2010)	163	Israel	HI	OCB	.39	.75	0.28

(Appendix continues)

Appendix (continued)

Study	N	Moderator coding		LMX/correlate			
		Country	HI/ VC	Variable	r	α	Var
Wang et al. (2008)	168	China	VC	LMX		.86	0.57
Wang et al. (2008)	168	China	VC	TP	.27	.87	0.55
Wang et al. (2008)	168	China	VC	OCB	.29	.91	0.67
Wang et al. (2008)	168	China	VC	TI	-.05	.70	0.46
Wang et al. (2005)	162	China	VC	LMX		.81	0.34
Wang et al. (2005)	162	China	VC	TP	.38	.89	0.62
Wang et al. (2005)	162	China	VC	OCB	.29	.81	0.27
Wang et al. (2005)	162	China	VC	TL	.71	.93	0.20
Wat & Shaffer (2005)	183	China	VC	LMX		.88	0.90
Wat & Shaffer (2005)	183	China	VC	OCB	.12	.95	2.04
Wat & Shaffer (2005)	183	China	VC	DJ	.25	.95	1.77
Wat & Shaffer (2005)	183	China	VC	PJ	.25	.93	0.98
Wat & Shaffer (2005)	183	China	VC	IJ	.16	.90	1.14
Wat & Shaffer (2005)	183	China	VC	LT	.32	.95	2.72
Watson (2010)	182	United States	HI	LMX		.89	0.38
Watson (2010)	182	United States	HI	LT	.40	.88	0.44
Wayne & Ferris (1990), Sample 1	96	United States	HI	LMX		.77	
Wayne & Ferris (1990), Sample 1	96	United States	HI	TP	.65	.87	0.50
Wayne & Ferris (1990), Sample 2	84	United States	HI	LMX		.81	
Wayne & Ferris (1990), Sample 2	84	United States	HI	TP	.54	.91	0.37
Wayne & Green (1993)	73	United States	HI	LMX		.91	0.67
Wayne & Green (1993)	73	United States	HI	OCB	.25	.76	0.59
Wayne et al. (1999)	245	United States	HI	LMX		.91	1.39
Wayne et al. (1999)	245	United States	HI	TP	.34	.87	2.69
Wayne et al. (2002)	211	United States	HI	LMX		.89	2.02
Wayne et al. (2002)	211	United States	HI	TP	.31	.85	1.04
Wayne et al. (2002)	211	United States	HI	OCB	.20	.83	1.02
Wayne et al. (2002)	211	United States	HI	DJ	.48	.92	2.31
Wayne et al. (2002)	211	United States	HI	PJ	.51	.88	1.96
Wayne et al. (2002)	211	United States	HI	AC	.41	.82	1.93
Wayne et al. (1997)	252	United States	HI	LMX		.90	1.17
Wayne et al. (1997)	252	United States	HI	TP	.45	.92	0.45
Wayne et al. (1997)	252	United States	HI	OCB	.26	.86	0.94
Wayne et al. (1997)	252	United States	HI	AC	.36	.87	0.94
Wayne et al. (1997)	252	United States	HI	TI	-.40	.89	2.16
Wech (2001)	403	Canada	HI	LMX		.90 ^a	0.20
Wech (2001)	403	Canada	HI	TP	.52	.95	0.42
Wech (2001)	403	Canada	HI	OCB	.32	.93	0.23
Wech (2001)	403	Canada	HI	JS	.15	.77	0.49
Wheeler et al. (2010)	282	United States	HI	LMX		.94	0.74
Wheeler et al. (2010)	282	United States	HI	TI	-.28	.86 ^a	1.54
White (2007)	1,200	United States	HI	LMX		.75	0.42
White (2007)	1,200	United States	HI	IJ	.77	.79	0.56
White (2007)	1,200	United States	HI	LT	.80	.81	1.88
Whittington (1997)	209	United States	HI	LMX		.91	1.64
Whittington (1997)	209	United States	HI	TP	.34	.81	0.25
Whittington (1997)	209	United States	HI	OCB	.38	.95	1.17
Whittington (1997)	209	United States	HI	AC	.43	.80	0.69
Whittington (1997)	209	United States	HI	NC	.10	.75	1.04
Whittington (1997)	209	United States	HI	CC	-.14	.76	1.35
Whittington (1997)	209	United States	HI	LT	.85	.96	2.86
Wilhelm et al. (1993)	141	United States	HI	LMX		.92	0.62
Wilhelm et al. (1993)	141	United States	HI	TP	.34	.87	0.75
Wilhelm et al. (1993)	141	United States	HI	DJ	.76	.95	1.77
Wilhelm et al. (1993)	141	United States	HI	JS	.72	.89	0.08
Wilhelm et al. (1993)	141	United States	HI	TI	-.38	.88	3.24
Williams et al. (1996)	183	United States	HI	LMX		.95	
Williams et al. (1996)	183	United States	HI	AC	.39	.81	
Y.-J. Wu (2009)	231	Taiwan	VC	LMX		.93	1.12
Y.-J. Wu (2009)	231	Taiwan	VC	OCB	.19	.92	0.25

(Appendix continues)

Appendix (*continued*)

Study	N	Moderator coding		LMX/correlate			
		Country	HI/ VC	Variable	r	α	Var
Yagil (2006)	152	Israel	HI	LMX		.78	1.37
Yagil (2006)	152	Israel	HI	PJ	.45	.84	1.42
Yagil (2006)	152	Israel	HI	JS	.67	.84 ^a	1.46
Yeh (2005)	202	United States	HI	LMX		.88	0.80
Yeh (2005)	202	United States	HI	AC	.55	.89	0.86
Yeh (2005)	202	United States	HI	NC	.22	.81	0.64
Yeh (2005)	202	United States	HI	CC	-.10	.82	0.79
Yeh (2005)	202	United States	HI	JS	.49	.89	0.96
Yeh (2005)	202	United States	HI	TI	-.31	.85	1.37
Yi (2002)	633	China	VC	LMX		.72	0.32
Yi (2002)	633	China	VC	JS	.21	.81	0.31
Yi (2002)	633	China	VC	AC	.49	.88	0.53
Zalesny & Kirsch (1989)	76	United States	HI	LMX		.90 ^a	
Zalesny & Kirsch (1989)	76	United States	HI	TP	.46	.84	1.00
Zhang et al. (2010)	165	China	VC	LMX		.92	1.44
Zhang et al. (2010)	165	China	VC	TP	.34	.88	0.36
Zhang et al. (2010)	165	China	VC	AC	.28	.85	1.17
Zhang et al. (2010)	165	China	VC	JS	.39	.88	0.61

Note. LMX = leader-member exchange; HI = horizontal individualism; VC = vertical collectivism; α = internal consistency (Cronbach's α); Var = study variance; OCB = organizational citizenship behavior; TP = task performance; DJ = distributive justice; PJ = procedural justice; JS = job satisfaction; TI = turnover intentions; TL = transformational leadership; AC = affective organizational commitment; IJ = interactional justice; LT = leader trust; NC = normative organizational commitment; CC = continuance organizational commitment.

^a Imputed Cronbach's α based on reliability generalization.

Received November 14, 2010

Revision received June 20, 2012

Accepted July 23, 2012 ■