Gender differences in the impact of leadership styles on subordinate embeddedness and job satisfaction

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ARTICLE INFO

ABSTRACT

It is not surprising that subordinates generally prefer high-quality relationships with their supervisors. However, gender may influence the *specific characteristics* subordinates use to make this judgment, thereby impacting important downstream workplace processes and outcomes. Drawing from Social Role Theory, we use moderated mediation analyses across two independent samples to show that communally oriented leader–member exchange (LMX) dimensions (i.e., Affect and Loyalty) positively influence the job embeddedness of female (but not male) subordinates, whereas agentically oriented LMX dimensions (i.e., Professional Respect and Contribution) influence both genders equally. We found these effects despite strong LMX facet intercorrelations (ranging from $r = .68$ to $.81$), thereby highlighting the utility of testing theoretically driven dimensional effects, even when facets overlap significantly.

Introduction

The supervisor–subordinate relationship influences a myriad of important organizational outcomes. This is the case because leaders are more than just managers of work-related information and behavior — they also guide, support, and inspire their subordinates (Cable & Judge, 2003; Falbe & Yukl, 1992). Indeed, subordinates perceive supervisors as their most immediate organizational representatives, and use exchange quality as an indicant of organizational acceptance (Collins, Mossholder, & Taylor, 2012). As such, quality relations with supervisors contribute to embedding employees into their jobs (Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012; Gerstner & Day, 1997; Harris, Wheeler, & Kacmar, 2011; Lee, Mitchell, Sablynski, Burton, & Holtom, 2004).

One of the most common ways to conceptualize supervisor–subordinate relation quality is Leader Member Exchange Theory (LMX), which posits that each supervisor–subordinate dyad is unique. As such, leaders form different types of relationships with their subordinates, ranging from those focused on contractual obligations (i.e., "out-group") to those based on mutual trust and admiration (i.e., "in-group" — Dansereau, Graen, & Haga, 1975). Not surprisingly, meta-analytic evidence (Gerstner & Day, 1997) suggests that LMX quality is associated with key outcomes including subordinate job satisfaction ($r = .50$), organizational commitment ($r = .42$), and turnover intent ($r = -.31$).

Although leaders are responsible for enacting a broad range of behaviors, LMX is frequently treated as a unitary construct (e.g., Dulebohn et al., 2012; Gerstner & Day, 1997; Ilies, Nahrgang, & Morgeson, 2007; Kang, Stewart, & Kim, 2011; Wayne, Shore, Bommer, & Tetrick, 2002). For example, Harris et al. (2011) showed that job embeddedness mediates the relationship between

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high quality LMX relationships and positive workplace outcomes (e.g., increased job satisfaction, decreased turnover intent, and decreased actual turnover), but these authors implicitly assumed this process was consistent across the various facets of LMX and among different types of subordinates. An alternative approach, however, predicts that "explicitly treating LMX as a multidimensional construct may provide theoretical clarity as well as greater precision in empirical research" (Dienesch & Liden, 1986, p. 624). Consistent with this perspective, we posit that there are *a priori* reasons to believe that the process outlined by Harris et al. is not consistent across LMX facets.

The present investigation tests this prediction, using a two-fold rationale for doing so: (1) the facets of LMX evaluate fundamentally different aspects of leader–member relationships (Carver, 1989; Liden & Maslyn, 1998) and (2) disparate socialization experiences lead men and women to expect different types of relationships with their supervisors (Eagly, 1987). We first describe how and why job embeddedness connects LMX to job satisfaction. After establishing this linkage, we then explain how extant theory, coupled with a facet-based understanding of LMX, helps shed new light on gender as a critical boundary condition of this process. We then utilize a rigorous analytic framework (i.e., moderated mediation) to examine how subordinate gender influences perceptions of four LMX dimensions, thereby affecting the underlying process identified by Harris et al. (2011).

Job embeddedness as a mediating mechanism

One mechanism shown to mediate leader–member relationships and valued workplace outcomes is job embeddedness (Harris et al., 2011), broadly conceptualized as the extent to which employees feel connected to their job or organization (Mitchell, Holtom, Lee, Sablynski, & Erez, 2001). More specifically, Mitchell and colleagues advanced this concept to explain how individual linkages (i.e., connections to valued aspects of one's work) collectively reinforce employees' willingness to remain in their jobs. As such, job embeddedness represents a web of influences that enmesh individuals in their workplace. Job embeddedness has been related to organizational outcomes such as voluntary turnover, actual turnover, work attitudes, and job performance (Holtom & Inderrieden, 2006; Lee, Mitchell, Sablynski, Burton, & Holtom, 2004; Mitchell et al., 2001).

Harris et al. (2011) showed that the LMX–job embeddedness link "increases job satisfaction and decreases turnover intentions and behaviors" (p. 277). The explanation for this mediated relationship centers on Conservation of Resources Theory (CoR: Hobfoll, 1989), which states that employees seek to accumulate, protect, and allocate a diverse array of resources. Ultimately, then, working with supervisors who compliment their preferred working style reduces the energy subordinates must exert to maintain this relationship. In the following section, we outline why subordinate gender likely influences the attractiveness of the various dimensions of LMX, thereby differentially affecting employees' embeddedness and subsequent downstream outcomes.

The moderating role of gender

Extant research suggests that men and women respond differently to various aspects of social relationships, which can be categorized as either communal or agentic (Bakan, 1966; Eagly, 1987; Koenig, Eagly, Mitchell, & Ristikari, 2011). The communal dimension is interpersonally oriented and broadly described as a concern for the welfare of others (e.g., nurturing, sympathetic, friendly), with women scoring higher on this dimension than men (Eagly, 1987, 2009; Spence & Buckner, 2000). The agentic dimension is task-oriented and defined by independent, masterful, and assertive tendencies (e.g., competitive, ambitious, dominating), with men scoring higher on this dimension than women (Eagly, 1987; Eagly & Johannesen-Schmidt, 2001; Spence & Buckner, 2000).

Social Role Theory undergirds the proposed moderator effects, positing that differences in societal roles lead men and women to demonstrate and value different types of interpersonal behaviors (Eagly, 1987; Eagly & Johannesen-Schmidt, 2001). Because men traditionally occupy more managerial and executive roles, they tend to value and engage in more agentic behaviors, whereas, because women traditionally occupy more caretaking roles, they tend to value and engage in more communal behaviors (Eagly, 1987; Koenig et al., 2011). Consistent with this notion, Eagly and colleagues (Eagly, 1987; Eagly, Johannesen-Schmidt, & van Engen, 2003; Eagly & Steffen, 1984; Hesselbart, 1977) found small or no gender differences in the agentic behaviors of men and women who occupy leadership roles.

In addition, they found stereotypical gender differences in laboratory settings (where leaders have not been selected, trained, or socialized), thereby neutralizing the effects of occupational roles and increasing the salience of socially influenced gender roles (Eagly & Johnson, 1990). Further, even in leadership roles, gender differences exist along the communal dimension (Moskowitz, Suh, & Desaulniers, 1994) as female leaders show empathy and build relationships more readily than their male counterparts (Fletcher, Jordan, & Miller, 2000). Taken together, these findings suggest that both genders internalize the agentic component of their leadership roles, but female leaders also enact socially influenced, communal behaviors (Eagly & Johannesen-Schmidt, 2001) (Fig. 1).

Hypotheses

Harris et al. (2011) took steps to explain how job embeddedness intervenes between LMX and various outcomes but, again, they treated LMX as a unitary construct. By examining LMX in this manner, the Harris et al. study precluded a fine-grained test of the aforementioned gender-based effects on subordinates' preferred leader behavior (i.e., agentic *versus* communal). To extend the findings of Harris et al., while simultaneously testing the utility of the LMX facet-based approach, we use Liden and Maslyn's (1998) LMX model, which specifies four facets of leadership behavior. Affect and Loyalty represent the communal dimension of leader behavior and Contribution and Professional Respect comprise the agentic.
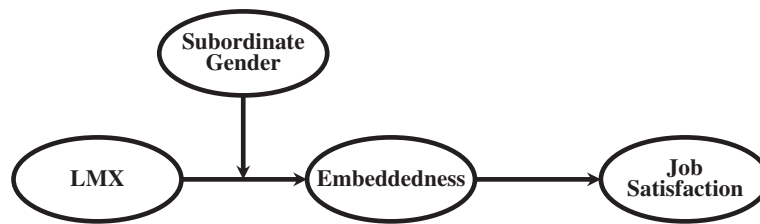
Fig. 1. General hypothesized moderated-mediation model.

Affect

The Affect dimension of LMX is defined as "the mutual affection members of the dyad have for each other based primarily on interpersonal attraction, rather than work or professional values" (p. 50). LMX-Affect can be categorized as a communal dimension because it emphasizes the interpersonal relationship between the subordinate and the leader. Consistent with Social Role Theory, women are stereotypically higher in affiliation (i.e., a desire to seek out and sustain personal friendships) than men due to their past socialization experiences (Williams & Best, 1990). Reflected in the premium women tend to ascribe to interpersonal relationships (Konrad, Ritchie, Lieb, & Corrigall, 2000), Social Role Theory suggests that women perceive developing personal relationships to be a key aspect of effective leadership (Aldoory & Toth, 2004). In fact, the desire for interpersonal relationships appears to be the largest gender-driven difference in the area of job attribute preferences (Konrad et al., 2000). Social Role Theory, therefore, predicts that women are more likely to expect and value a strong interpersonal relationship with their supervisor, which helps to embed them into their job and promote positive work attitudes. However, men's lower desire for communal activities suggests that the interpersonal aspect of the leader–member exchange will be less salient for male subordinates.

Hypothesis 1a. *Job embeddedness will mediate the relationship between LMX-Affect and job satisfaction.*

Hypothesis 2a. *Subordinate gender will moderate the mediating effect of job embeddedness on the relationship between LMX-Affect and job satisfaction, such that affect for one's leader will lead to higher levels of job embeddedness for females compared to males, which will positively influence job satisfaction for females but not males.*

Loyalty

The Loyalty dimension of LMX is defined as "the public support for the goals and the personal character of the other member of the LMX dyad" (Liden & Maslyn, 1998, p. 50). LMX-Loyalty can also be categorized as a communal dimension because it emphasizes mutual support. Consistent with Social Role Theory, women typically score higher than men in succorance, one component of which is the desire to receive support from one's acquaintances (Williams & Best, 1990). Therefore, it is likely that women will respond more positively to perceived loyalty from their supervisors than men. Empirical evidence suggests that women tend to nurture, help, and sympathize more than men (Costa, Terracciano, & McCrae, 2001; Spence & Buckner, 2000). One workplace manifestation of this tendency is that women tend to gravitate toward jobs in which they have the opportunity to help others (Konrad et al., 2000). Social Role Theory, therefore, predicts that women are likely to value a mutually supportive relationship with their supervisor more than men.

Hypothesis 1b. *Job embeddedness will mediate the relationship between LMX-Loyalty and job satisfaction.*

Hypothesis 2b. *Subordinate gender will moderate the mediating effect of job embeddedness on the relationship between LMX-Loyalty and job satisfaction, such that loyalty from one's leader will lead to higher levels of job embeddedness for females compared to males, which will positively influence job satisfaction for females but not males.*

Contribution

The Contribution dimension of LMX is defined as the "perception of the current level of work-oriented activity each member puts forth toward the mutual goals (explicit or implicit) of the dyad" (p. 50). For example, subordinates may go beyond their job description and supervisors respond by providing "resources and opportunities for such activity" (Liden & Maslyn, 1998, p. 50). LMX-Contribution can be categorized as an agentic dimension because it is task-oriented. As subordinates assist their supervisor, they anticipate a future return on their investment because achieving mutual goals benefits both dyadic members. Given that both male and female subordinates are likely to view agentic behaviors as a key part of leadership (Koenig et al., 2011), it is possible that male and female subordinates will expect and value contribution. Some evidence, however, suggests that men are more likely to choose challenging tasks (De Pater, Van Vianen, Fischer, & Van Ginkel, 2007) and develop relationships with their supervisors in ways that facilitate these opportunities. Contrary to this perspective, however, meta-analytic estimates of the difference between males' and females' preference for promotion and challenge are very small (i.e., $d = .04$ for promotion opportunity and $d = .05$ for challenge; Konrad et al., 2000). Thus, while we hypothesize that job embeddedness will mediate the

relationship between LMX-Contribution and job satisfaction, we address the moderating role of gender as an exploratory research question, as opposed to a formal hypothesis.

Hypothesis 1c. *Job embeddedness will mediate the relationship between leader contribution and job satisfaction.*

Research Question 1. *Will subordinate gender moderate the mediating effect of job embeddedness on the relationship between leader contribution and job satisfaction?*

Professional Respect

The Professional Respect dimension of LMX is defined as "the degree to which each member of the dyad has built a reputation, within and/or outside of the organization, of excelling at his or her line of work" (Liden & Maslyn, 1998, p. 50). It emphasizes competence, visibility, and power, which are all agentic characteristics. Similar to LMX-Contribution, Social Role Theory predicts that both genders are likely to value LMX-Professional Respect. Men are stereotypically higher in exhibition (i.e., desire to seek the attention of others) than women (Williams & Best, 1990), which relates to seeking prestige and recognition in the workplace (Konrad et al., 2000). Given these differences, it is tempting to infer that men would also prefer to bask in the reflected glory of supervisors with positive reputations. Once again, however, the actual difference between males' and females' preferences for recognition is small ($d = .03$; Konrad et al., 2000). Indeed, a recent study found that both males and females believe that providing recognition is an important aspect of leadership (Aldoory & Toth, 2004). Thus, while we hypothesize that job embeddedness will mediate the relationship between LMX-Professional Respect and job satisfaction, we address the moderating role of gender *via* an exploratory research question.

Hypothesis 1d. *Job embeddedness will mediate the relationship between professional respect and job satisfaction.*

Research Question 2. *Will subordinate gender moderate the mediating effect of job embeddedness on the relationship between professional respect and job satisfaction?*

The present study makes at least three important theoretical contributions. First, a facet-based treatment of LMX permits examining the potentially differential effects of dyadic exchange quality based on subordinate gender. Second, it explicates how work expectations and experiences of male subordinates and female subordinates not only differ, but also translate into diverging workplace perceptions, processes, and outcomes. Third, it advances the field's understanding of the antecedents, consequences, and boundary conditions of job embeddedness.

Method

Methodological overview

We used data from two samples for purposes of (a) internal replication and (b) to extend the findings of past studies by testing the moderating effects of gender on the relationship between the facets of LMX and job embeddedness. Specifically, Sample 1 probed the moderated mediation model, highlighting gender as a boundary condition and Sample 2 replicates these findings using the same measures, but a substantively different (and statistically independent) group of participants.

Sample 1 method

Sample and procedure

Sample 1 data were collected from employees from all aspects of an organization in the recreational products industry. A member of the research team met with the president of the company to plan the study and answer specific questions. The company provided an organizational chart along with the names and email addresses of employees. Employees were then notified about the upcoming project and encouraged to participate. Roughly one week later, an email containing a link to the survey was sent to each employee. Respondents were assured of the confidentiality of their responses. The final sample included 193 respondents (62% response rate), was 69% male, 78% Caucasian and averaged about 32 years of age.

Measures

Respondents used a 5-point Likert scale (1 = strongly disagree and 5 = strongly agree) unless otherwise indicated. All items were coded such that higher scores indicate higher levels of the construct of interest. Items were averaged within the scales to create a composite score for each construct.

Affect for leader

The degree to which subordinates personally like their supervisors was measured using Liden and Maslyn's (1998) three-item ($\alpha = .95$) Affect dimension of the leader–member exchange scale. For example, "I like my supervisor very much as a person."

Loyalty

The degree to which leaders are perceived as expressing support for the character and goals of their subordinates was captured with Liden and Maslyn's (1998) three-item Loyalty scale ($\alpha = .88$). For example, "My supervisor defends my decisions, even without complete knowledge of the issue in question."

Contribution

The degree to which subordinates are willing to contribute work-oriented activity to support the dyad was measured using Liden and Maslyn's (1998) three-item ($\alpha = .91$) Contribution dimension of the leader–member exchange scale. An example item is, "I do not mind working my hardest for my supervisor."

Professional respect

The degree to which subordinates regard their supervisors as capable and competent was empirically assessed using Liden and Maslyn's (1998) three-item ($\alpha = .94$) Professional Respect dimension of the leader–member exchange scale. An example is, "I respect my supervisor's knowledge and competence on the job."

Job embeddedness

Crossley, Bennett, Jex, and Burnfield's (2007) seven-item ($\alpha = .93$) scale was used to measure how deeply entrenched employees are in their organization and how difficult it would be for employees to uproot. For example, "I am tightly connected to this organization."

Gender

A dummy variable was created to record employee gender ($0 =$ female, $1 =$ male).

Job satisfaction

We used Cammann, Fichman, Jenkins, and Klesh's (1983) three-item ($\alpha = .93$) job satisfaction scale. Examples include: "All in all, I am satisfied with my job."

Sample 1 results

Before testing our primary hypotheses, we first used confirmatory factor analysis (AMOS version 18.0 — Arbuckle, 2009) to test the construct validity of the measures used in our study. We expected the specific scale items to load on their corresponding latent variables in a manner consistent with extant research, which created the expected six-factor model shown in Table 1. The overall model-to-data fit was acceptable ($\chi^2 = 329.97$, $df = 193$, $p < .01$; CFI $= .97$; IFI $= .97$; RMSEA $= .06$) and all items loaded on their expected factors at a statistically significant level ($p < .05$).

To ascertain if any of these variables shared commonalities (thereby suggesting factor grouping), we tested five alternative models. The first model allowed all items to load on a single, common factor. Results indicated that the overall model-to-data fit was inadequate ($\chi^2 = 2244.67$, $df = 210$, $p < .01$; CFI $= .55$; IFI $= .54$; RMSEA $= .22$), and that the chi-square difference test was statistically significant ($\chi^2_{\text{diff}}(17) = 1914.70$, $p < .01$), suggesting that these factors should not be combined. In the second model we created a three-factor solution, combining the exchange quality dimensions (i.e., Affect, Loyalty, Contribution, and Professional Respect) into one factor. Results indicated that the overall model-to-data fit was inadequate ($\chi^2(df) = 914.02$ (205), $p < .01$; CFI $= .84$; NFI $= .84$; RMSEA $= .13$) and the chi-square difference was statistically significant ($\chi^2_{\text{diff}}(12) = 584.05$, $p < .01$), suggesting that these factors should not be combined. Table 1 lists the remaining factor combinations, all of which were also inferior to the expected six-factor model.

To further establish the validity of the measures, we calculated the Average Variance Explained (AVE) using the loadings from the expected six-factor measurement model. Convergent validity is suggested if the AVE of each latent variable exceeds .50, which was the case for each of the scale variables in this study. Further, discriminant validity is suggested when the AVE of a given variable is greater than the squared correlation between it and the other variables in the study. The data in this study met this requirement, thereby suggesting convergent and discriminant validity of the latent variables.

Table 1
Alternative model test results (Sample 1).

Model	X^2	Df	X^2_{diff}	Df_{diff}	CFI	IFI	RMSEA
6-Factor expected model	329.97	193	–	–	.97	.97	.06
3-Factor (combined aff, con, loyal, & respect)	914.02	205	584.05**	12	.84	.84	.13
2 Factor (combined job sat and embed)	1206.44	208	876.47**	15	.78	.78	.16
2 Factor (combined LMX and job sat)	1378.64	208	1048.67**	15	.74	.74	.17
2 Factor (combined LMX and embed)	1884.98	208	1555.01**	15	.63	.62	.20
1-Factor (all items load on a single factor)	2244.67	210	1914.70**	17	.55	.54	.22

Note: $n = 193$.
** $p < .01$.

The descriptive statistics and intercorrelations for Sample 1 variables are presented in Table 2. As expected, the four LMX dimensions positively correlate with each other ($\bar{r} = .72$, $p < .01$). Despite these intercorrelations, the measurement models discussed previously indicate that these items reflect four different factors, as opposed to one global exchange quality factor. None of the other study variables showed correlations greater than $r = .60$, which is consistent with the results of the convergent and discriminant analyses described previously. Embeddedness and job satisfaction were also positively correlated ($\bar{r} = .59$, $p < .01$).

Testing indirect effects (i.e., mediation)

Hypotheses 1a–1d suggest that job embeddedness mediates the relationship between each LMX dimension and job satisfaction. We used an SPSS macro developed by Preacher and Hayes (2004) to examine this question using a two-tailed significance test (Sobel, 1982).

Hypotheses 1a–1d are all supported. For Hypothesis 1a, the indirect (i.e., mediating) effect of job embeddedness on the relationship between leader affect and job satisfaction is significant ($\hat{y} = .15$, $p < .01$, $R^2 = .48$). To corroborate this result with a structural equation model (AMOS 18 − Arbuckle, 2009) we created a multiple path model and used the unstandardized regression coefficients to calculate the indirect effect using the SOBEL technique. The sign and significance of these results ($\hat{y} = .20$, $p < .01$; $R^2 = .48$) were consistent with those generated using the SPSS macro. The results for Hypothesis 1b indicate that job embeddedness mediates the Loyalty–job satisfaction relationship (SPSS macro: $\hat{y} = .15$, $p < .01$, $R^2 = .44$|AMOS path model: $\hat{y} = .25$, $p < .01$, $R^2 = .55$). The results for Hypothesis 1c indicate that job embeddedness mediates the Contribution–job satisfaction relationship (SPSS macro: $\hat{y} = .24$, $p < .01$, $R^2 = .44$|AMOS path model: $\hat{y} = .36$, $p < .01$, $R^2 = .54$). The results for Hypothesis 1d indicate that job embeddedness mediates the Professional Respect–job satisfaction relationship (SPSS macro: $\hat{y} = .16$, $p < .01$, $R^2 = .46$|AMOS path model: $\hat{y} = .24$, $p < .01$, $R^2 = .56$). For ease of reference and comparison to Sample 2, these results are also presented in Table 3.

Testing conditional indirect effects (i.e., moderated mediation)

Preacher, Rucker, and Hayes (2007) suggest that a conditional indirect effect exists when the strength of an indirect (i.e., mediating) effect is contingent upon the level of a boundary variable. Conditional indirect effect analyses, therefore, look for evidence of mediation across a range of conditions (i.e., at specific points of a moderator). We tested what Hayes (2013) refers to as "Model 7" in the moderated-mediation literature. Specifically, we hypothesized that subordinate gender will moderate the mediating influence of embeddedness on the relationship between the two communal LMX dimensions assessed here (i.e., Affect and Loyalty) and job satisfaction.

Hypothesis 2a proposed that LMX-Affect will lead to higher levels of job embeddedness for females compared to males, which will subsequently impact job satisfaction for females but not males. Consistent with this hypothesis, Table 4 shows that the indirect effect (i.e., the estimated mediation coefficient) between LMX-Affect and job satisfaction was statistically significant for females ($B = .29$, $p < .01$) but not for males ($B = .09$, ns). Hypothesis 2b proposed that LMX-Loyalty will lead to higher levels of job embeddedness for female subordinates compared to male subordinates, which will subsequently impact job satisfaction for the former but not the latter. Consistent with this hypothesis, Table 5 shows that this relationship was statistically significant for female subordinates ($B = .27$, $p < .01$) but not male subordinates ($B = .09$, ns).

We found no evidence of a meaningful effect for Research Question 1, in that the indirect effects of embeddedness were observed between LMX-Contribution and job satisfaction for both males ($B = .19$, $p < .01$) and females ($B = .29$, $p < .01$). Likewise, we found no evidence of a meaningful moderator effect for Research Question 2, in that the indirect effects of embeddedness were found between LMX Professional Respect and job satisfaction for both males ($B = .11$, $p < .05$) and females ($B = .23$, $p < .01$).

Table 2
Means, standard deviations, and intercorrelations for study variables.

		Sample 1			Sample 2			1	2	3	4	5	6	7
		Mean	SD	α	Mean	SD	α							
1	Affect for leader	3.65	.95	.95	3.92	.86	.93	–	.80**	.81**	.76**	.46**	−.02	.50**
2	Loyalty to leader	3.33	.91	.88	3.65	.87	.89	.75**	–	.79**	.68**	.47**	−.05	.52**
3	Contribution	3.89	.73	.91	3.93	.78	.89	.71**	.68**	–	.79**	.53**	−.07	.52**
4	Professional respect	3.71	.96	.94	3.97	.82	.89	.78**	.68**	.72**	–	.52**	−.01	.47**
5	Embeddedness	3.23	.96	.93	3.21	.96	.92	.27**	.24**	.32**	.28**	–	−.01	.68**
6	Gender	.69	.46	N/A	.23	.42	N/A	−.22**	−.13	−.15*	.20**	−.17*	–	−.07
7	Job satisfaction	3.81	.97	.93	−.02	.99	.95	.46**	.37**	.40**	.43**	.59**	−.13	–

Note: Sample 1 appears below the diagonal, $n = 193$. Sample 2 appears above the diagonal, $n = 146$.
 * $p < .05$.
 ** $p < .01$.

Table 3
Indirect effects (mediation).

Job embeddedness mediating relation between	Sample1 ($n = 193$)				Sample 2 ($n = 146$)			
	SPSS Sobel macro		AMOS Sobel path model		SPSS Sobel macro		AMOS Sobel path model	
	Indirect effect	R^2	Indirect effect	R^2	Indirect effect	R^2	Indirect effect	R^2
Leader affect and job satisfaction	.15**	.48**	.20**	.48**	.30**	.57**	.42**	.62**
Loyalty and job satisfaction	.15**	.44**	.25**	.55**	.30**	.57**	.30**	.64**
Contribution and job satisfaction	.24**	.44**	.36**	.54**	.36**	.58**	.33**	.64**
Professional respect and job satisfaction*	.16**	.46**	.24**	.56**	.35**	.56**	.40**	.61**

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

Sample 2 method

Sample and procedure

Sample 2 data were collected from employed, non-traditional students (median age = 34 years), enrolled in multiple, senior-level business management courses at a large university in the southern United States. A total of 199 individuals from multiple, senior-level classes indicated interest in the project by supplying the requisite contact information. The final sample included 146 participants (73% response rate), was 76% female, and had been in their current job for about 6 years (median = 5).

Subordinates provided basic demographics (e.g., age, tenure) and responses regarding the independent variables (i.e., the four LMX dimensions) *via* an online survey. Three weeks later, subordinates received another electronic survey that measured their embeddedness. A few weeks after that, employees rated their level of job satisfaction.

Measures

We used the same scales for Sample 2 as we used in Sample 1 and the internal reliability results were consistent with those reported for Sample 1 (see Table 2). Again, respondents used a 5-point Likert scale (1 = strongly disagree and 5 = strongly agree) unless otherwise indicated and all items were coded such that higher scores indicate higher levels of the construct of interest.

Sample 2 results

We again confirmed the measurement model for Study 2. As seen in Table 6, the overall model-to-data fit was acceptable ($\chi^2 = 360.75$, $df = 193$, $p < .01$; CFI = .96; IFI = .95; RMSEA = .08) and all items loaded on their expected factors at a statistically significant level ($p < .05$). Additionally, the intended six-factor model fit the data better than the alternative models shown in Table 6. As with Study 1, the AVEs exceeded .50 and are greater than the squared correlation between it and the other variables in the study.

Table 4
Moderated mediation regression results (Sample 1).

Predictor	Embeddedness			
	B	SE	t	p
Constant	.07	.13	.55	.58
Affect for leader	.53	.14	3.70	.00
Gender	−.15	.15	−.99	.32
Affect × gender	−.36	.16	−2.18	.03
Predictor	Job satisfaction			
	B	SE	t	p
Constant	3.77	.10	38.48	.00
Embeddedness	.55	.06	9.86	.00
Gender (moderator)	Conditional effects			
	AxB	SE	Z	p
Female	.29	.08	3.45	.00
Male	.09	.05	2.01	.06

Note: $n = 193$. Unstandardized regression coefficients are reported. Index of moderated mediation = −.21, 95% confidence interval (CI) = [−.35, −.07].

Table 5
Moderated mediation regression results (Sample 1).

Predictor	Embeddedness			
	B	SE	t	p
Constant	.15	.12	1.24	.22
Loyalty	.46	.13	3.46	.00
Gender	−.24	.15	−1.65	.10
Loyalty × gender	−.30	.16	−1.90	.05
Predictor	Job satisfaction			
	B	SE	t	p
Constant	3.83	.10	39.34	.00
Embeddedness	.58	.06	9.99	.00
Gender (moderator)	Conditional effects			
	AxB	SE	Z	p
Female	.27	.08	3.26	.00
Male	.09	.05	1.76	.08

Note: $n = 193$. Unstandardized regression coefficients are reported. Index of moderated mediation = −.19, 95% confidence interval (CI) = [−.36, −.01].

The descriptive statistics and intercorrelations for Sample 2 variables are presented in Table 2. As in Sample 1, the positive correlations existed between the fairness dimensions ($\bar{r} = .77$, $p < .01$). Also like Sample 1, the Sample 2 measurement models indicate the data is best reflected as four distinct factors.

Testing indirect effects (i.e., mediation)

We tested Hypotheses 1a–1d in a manner consistent with how we analyzed Sample 1 data. Again, all of these hypotheses are supported. For Hypothesis 1a, the indirect (i.e., mediating) effect of job embeddedness on the relationship between LMX-Affect and job satisfaction is significant ($\hat{y} = .30$, $p < .01$, $R^2 = .57$). To corroborate this result with a structural equation model, using AMOS 18 (Arbuckle, 2009) we created a multiple path model and used the unstandardized regression coefficients to calculate the indirect effect using the SOBEL technique. The sign and significance of these results ($\hat{y} = .42$, $p < .01$; $R^2 = .62$) were consistent with those generated using the SPSS macro. The results for Hypothesis 1b indicate that job embeddedness mediates the relationship between LMX-Loyalty and job satisfaction (SPSS macro: $\hat{y} = .30$, $p < .01$, $R^2 = .57$|AMOS path model: $\hat{y} = .30$, $p < .01$, $R^2 = .64$). The results for Hypothesis 1c indicate that job embeddedness mediates the relationship between LMX-Contribution and job satisfaction (SPSS macro: $\hat{y} = .36$, $p < .01$, $R^2 = .58$|AMOS path model: $\hat{y} = .33$, $p < .01$, $R^2 = .64$). The results for Hypothesis 1d indicate that job embeddedness mediates the relationship between LMX-Professional Respect and job satisfaction relationship (SPSS macro: $\hat{y} = .35$, $p < .01$, $R^2 = .56$|AMOS path model: $\hat{y} = .40$, $p < .01$, $R^2 = .61$). Again, for ease of references in comparison to sample 1, these results are also presented in Table 3.

Testing conditional indirect effects (i.e., moderated mediation)

Consistent with Hypothesis 2a, Table 7 shows that the indirect effect (i.e., the estimated mediation coefficient) between LMX-Affect and job satisfaction was statistically significant for females ($B = .32$, $p < .01$) but not for males ($B = .19$, ns). Consistent with Hypothesis 2b, Table 8 shows that the indirect effect between LMX-Loyalty and job satisfaction was statistically significant for females ($B = .34$, $p < .01$) but not for males ($B = .14$, ns).

Again, we found no evidence of a meaningful moderator effect for Research Question 1, in that the indirect effects of embeddedness were observed between Contribution and job satisfaction for both males ($B = .22$, $p < .05$) and females ($B = .40$,

Table 6
Alternative model test results (Sample 2).

Model	X^2	Df	X^2_{diff}	Df_{diff}	CFI	IFI	RMSEA
6-Factor expected model	360.75	193	–	–	.96	.95	.08
3-Factor (combined aff, con, loyal, & respect)	611.13	205	281.16**	12	.89	.89	.12
2 Factor (combined job sat and embed)	914.24	208	584.27**	15	.82	.82	.15
2 Factor (combined LMX and job sat)	1051.21	208	721.24**	15	.78	.78	.17
2 Factor (combined LMX and embed)	1420.18	208	1090.21**	15	.69	.68	.20
1-Factor (all items load on a single factor)	1750.68	210	1420.71**	17	.60	.60	.22

Note: $n = 146$.
** $p < .01$.

Table 7
Moderated mediation regression results (Sample 2).

Predictor	Embeddedness			
	B	SE	t	p
Constant	−.03	.08	−.37	.71
Affect for leader	.54	.09	6.14	.00
Gender	.00	.17	−.03	.98
Affect × gender	−.21	.26	−.80	.42
Predictor	Job satisfaction			
	B	SE	t	p
Constant	3.82	.05	70.70	.00
Embeddedness	.59	.06	10.49	.00
Gender (moderator)	Conditional effects			
	AxB	SE	Z	p
Female	.32	.06	5.28	.00
Male	.19	.15	1.33	.18

Note: $n = 146$. Unstandardized regression coefficients are reported. Index of moderated mediation $= -.12$, 95% confidence interval (CI) $= [-.39, -.01]$.

$p < .01$). Likewise, we found no evidence of a meaningful moderator effect for Research Question 2, in that indirect effects for embeddedness were found between Professional Respect and job satisfaction for both males ($B = .35, p < .05$) and females ($B = .35, p < .01$).

Discussion

The results supported all six hypotheses across two independent (and substantively different) samples. These findings suggest that male and female subordinates perceive relations with their supervisors through qualitatively different lenses. Specifically, female subordinates appear to place more value on communal leader behaviors (i.e., LMX-Affect and LMX-Loyalty), whereas both genders value agentic leader behaviors (i.e., LMX-Contribution and LMX-Professional Respect). These findings are consistent with Social Role Theory, which predicts that spillover socialization from non-work roles leads women to value communal leader attributes more than men. Conservation of Resources Theory augments these results by predicting that both genders value agentic leader behaviors due its positive effects on resource allocation (Moskowitz et al., 1994).

These results are consistent with Harris et al.'s (2011) finding that quality supervisor relations embed subordinates into their jobs, leading to important work outcomes, but also extends their work in several important ways. First, Harris et al. used a sample of car dealers and called for replications using other occupations in order to establish generalizability. Second, they recommended

Table 8
Moderated mediation regression results (Sample 2).

Predictor	Embeddedness			
	B	SE	t	p
Constant	−.05	.08	−.65	.52
Loyalty	.57	.09	6.38	.00
Gender	.02	.17	.10	.92
Loyalty × gender	−.32	.22	−1.44	.15
Predictor	Job satisfaction			
	B	SE	t	p
Constant	3.82	.05	70.17	.00
Embeddedness	.59	.06	10.46	.00
Gender (moderator)	Conditional effects			
	AxB	SE	Z	p
Female	.34	.06	5.42	.00
Male	.14	.12	1.19	.24

Note: $n = 146$. Unstandardized regression coefficients are reported. Index of moderated mediation $= -.18$, 95% confidence interval (CI) $= [-.43, -.01]$.

that future researchers utilize Crossley et al.'s full (i.e., seven-item) measure of job embeddedness. Most importantly, using LMX facets permitted us to identify gender as an important boundary condition of their process model. Specifically, the communal dimensions of LMX (i.e., Affect and Loyalty) influenced job embeddedness and job satisfaction for female (but not male) subordinates. This is an important extension because Harris et al. treated LMX a unitary construct and controlled for the effects of gender. Given the ubiquitous and important role that gender plays in the modern workplace, we argue that such differences represent a theoretically and practically important contribution.

The current study also extends the work of Douglas (2012) by showing that gender does actually appear to moderate the relationship between LMX and various job outcomes, but only when LMX is treated as a multifaceted construct. This is an important distinction because Douglas reported that gender does not influence the relationship between overall LMX quality and job outcomes, but the more fine-grained analyses presented here (i.e., wherein LMX is treated as a multidimensional construct) show that male and female subordinates react to the LMX facets differently. Indeed, we analyzed the present data in a manner that mirrored Douglas (2012) approach (i.e., treating LMX as a unidimensional entity) and they displayed the same pattern of results as Douglas, in that gender did not moderate the relationship between overall LMX and job satisfaction.

Implications

These findings bring the difference between the unitary and dimensional approaches to LMX into specific relief. Although tangible opportunities for advancement influenced both genders' job embeddedness, their supervisor's socio-emotional support and stability also affected women's job embeddedness. These results suggest that LMX is a multifaceted social construct which individuals interpret (at least partially) through the lens of one's gender. As such, a unidimensional configuration may obscure important relational dynamics such as those found in the current study.

Critically, these differential effects were found *despite* large intercorrelations among the facets of LMX (ranging from $r = $ .68–.81). This is an important finding because past theorists (e.g., Graen & Uhl-Bien, 1995) specifically referenced high intercorrelations as evidence for treating LMX as a unitary construct. The present findings suggest that fine-grained effects can still be identified despite this "massive redundancy" (p. 237). Indeed, as those who favor a facet-based approach have argued that multidimensionality exist when empirical evidence shows, "the dimensions differentially predict various outcomes consistent with theory and research" (Liden & Maslyn, 1998, p. 46). As such, we agree with Dienesch and Liden (1986) who argued that Graen and associates "move too quickly from their theoretical base in the role-definition processes to a unidimensional (presented as an in/out dichotomy or in/middle/out trichotomy) formulation of the model" (p. 624).

From a practical perspective, two contrasting approaches generally reflect attitudes toward gender differences in the workplace: the equity approach and the complimentary approach (Adler, 1986). The equity approach assumes similarity between men and women, and therefore encourages equal treatment and consistent norms for both genders. Conversely, the complimentary approach assumes that differences exist between men and women and, therefore, supports the use of norms unique to males and females. Taking the complimentary viewpoint, our findings suggest that personal support from their leaders relate to more positive work outcomes for female subordinates, whereas these behaviors affect male subordinates less. Thus, consistent with one of the fundamental tenets of LMX (i.e., leaders develop unique relationships with each of their subordinates), this study suggests that leaders should provide socio-emotional support for their female subordinates, but recognize these efforts may be less important to their male subordinates.

Despite its potentially controversial nature, the complimentary approach is worthy of continued philosophical and empirical attention for several reasons. First, if male subordinates begin to feel that female subordinates receive special attention, perceptions of unfairness and resentment may arise. Second, some might consider encouraging leaders to interact with their male subordinates and their female subordinates differently to be unpalatable. Society has made great strides (albeit far from complete) to create environments that facilitate equal opportunities for men and women, but the present empirical evidence suggests that, in order to obtain equal opportunities for job embeddedness and job satisfaction, supervisors may need to tailor their behavior based on subordinate gender Again, this controversial topic is worthy of serious debate and consideration; we hope the present findings shed important empirical light on it.

Limitations and future research

Although this study has important implications, it also has several potential limitations. First, participants in both samples self-selected into this study. Thus, perhaps only those subordinates with a particularly good or a particularly bad relationship with their supervisor elected to participate. That being said, results were replicated across two samples, which helps to assuage this concern. Second, both samples were somewhat imbalanced vis-à-vis gender: Sample 1 was 69% male and Sample 2 was 76% female. Given that the focus of this study is on the role of gender on perceptions of leadership, this imbalance would ordinarily be concerning. However, the results of the more female-dominated Sample 2 were uniformly stronger than the more male-dominated Sample 1 (see Tables 4–8), thereby serving as an interesting (albeit indirect) confirmation of this study's main hypothesis. Third, all variables in this study were subjective judgments, the nature of which might also be influenced by respondent gender. Thus, future studies would benefit from including objective measures of job outcomes, such as actual turnover. Another potential issue is that some of the subordinates in Sample 1 reported to the same supervisor, which may incur nested effects within supervisors. Although we cannot completely rule this out, we ran a battery of empirical tests, which suggest these effects are unlikely to impact the observed results.

Lastly, this study only examined a subset of possible process/outcome variables: job embeddedness and job satisfaction. Therefore, the present findings should only be interpreted with regard to the measured variables, though future studies should explore the moderating effect of gender on other relationship-based phenomena at work.

In terms of specific future research, it would be interesting to analyze the affective and attitudinal reactions of different types of subordinates to their leaders' agentic *versus* communal behaviors. Specifically, instead of correlating typical leader behaviors with employees' overall attitudes, future researchers might examine differences in the momentary emotional and task-based reactions of male and female subordinates to supervisors' actual communal and agentic behaviors. This approach would better capture differences across the experience of work for men *versus* women, thereby permitting investigation of job embeddedness as an emergent phenomenon. This program of research might also include examining potential differences in the extent to which male *versus* female subordinates actively solicit communal behavior from their leaders (e.g., how, when, and for what reasons they seek advice). Such a research agenda would represent a significant divergence in the way that LMX is studied in the organizational sciences, but is consistent with Weiss and Rupp's (2011) call for a more person-centric perspective.

Additionally, it would be interesting to study the genders of both dyadic members, rather than just subordinate gender. It is possible that male subordinates expect might only expect agentic behaviors from their leaders (male or female), whereas female subordinates might not expect communal behaviors from male leaders but may expect them from female leaders. Unfortunately, the nature of the present sample did not permit us to examine these questions. Further, the present study also did not identify any aspects of leader–subordinate relationships that were particularly valuable for male subordinates, but not female subordinates. As such, it would also be interesting to see if other aspects of leader–subordinate relationships might have the opposite effect of those found here (i.e., a significant moderating effect for male subordinates but not for female subordinates). For example, meta-analytic findings (Konrad et al., 2000) suggest that frequency of interactions with one's supervisor might fit this description, in that men show non-trivial preferences for solitude, autonomy, and leisure time away from work. To the extent that future research can continue to inform the development of high quality supervisor–subordinates relationships, regardless of gender, employees in general will benefit.

Conclusions

On the surface, it appears that high quality exchange relationships help embed all employees deeper into the organization. Therefore, supervisors should expect a healthy return on their invested efforts to enhance the dyadic relationship. However, deeper analyses reveal that gender creates different expectations regarding socio-emotional support (Williams & Best, 1990), thereby explaining how certain dimensions of LMX further embed females while having no such effect on male subordinates. That is, embeddedness appears to function as an intervening variable between the communal dimensions of LMX (i.e., Affect and Loyalty) and workplace outcomes for female subordinates, but not for their male counterparts. Conversely, embeddedness mediates the relationship between the agentic dimensions of LMX (i.e., Professional Respect and Contribution) and workplace outcomes for all subordinates. Further, these reactions have implications for both processes (job embeddedness) and more distal outcomes (job satisfaction). Importantly, we found these differential results despite strong intercorrelations among all four of the LMX facets. All said, the present results suggest that cross-gender relationships are as complex and important at work as they are in other domains of life.

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